

State of New Mexico

Enacting Solutions to Reduce Transportation-Related Climate Pollution

**New Mexico Environment Department
Phase 2 Implementation Grant Application**

April 1, 2024

**United States Environmental Protection Agency
Climate Pollution Reduction Grant Program**

1 COVER PAGE

OPPORTUNITY INFORMATION Agency: Title: Funding Opportunity #: Assistance listing #:	United States Environmental Protection Agency (EPA) Climate Pollution Reduction Grant (CPRG) Program: Implementation Grants General Competition EPA-R-OAR-CPRGI-23-07 66.046
APPLICANT INFORMATION Application Title: Applicant: Primary Contact Name: Phone Number: Email Address:	<i>Enacting Solutions to Reduce Transportation-Related Climate Pollution</i> New Mexico Environment Department (NMED) Claudia Borchert <i>Climate Change Bureau Chief</i> NMED Climate Change Bureau 505-699-8489 claudia.borchert@env.nm.gov
APPLICATION TYPE	<input checked="" type="checkbox"/> Individual State Applicant
APPLICABLE SECTORS	<input checked="" type="checkbox"/> Transportation <input checked="" type="checkbox"/> Commercial Buildings
APPLICABLE LOCATION	Statewide
SYNOPSIS OF MEASURES	<i>Clean Truck Incentive (CTI) Program:</i> <ul style="list-style-type: none"> Providing point-of-sale vouchers for zero-emission medium- and heavy-duty trucks and associated charging/fueling infrastructure, with technical assistance for fleet operators. <i>Efficient and Clean Operations for Schools (ECO Schools):</i> <ul style="list-style-type: none"> Providing public schools with charging infrastructure, electric school buses, technical assistance for fleet operators, and increased facility energy savings.
TOTAL REDUCED CLIMATE POLLUTION	Expected Total Cumulative Greenhouse Gas Emission Reductions: <ul style="list-style-type: none"> 2025-2030: 120,650 metric tons of carbon dioxide equivalent 2025-2050: 875,749 metric tons of carbon dioxide equivalent
TOTAL FUNDING REQUESTED	Total funding requested for the two measures in this application: \$97,796,560
RELEVANT PRIORITY CLIMATE ACTION PLAN (PCAP) PCAP Lead Organization: PCAP Title: NM PCAP, Direct Link: NM Public CPRG Website: Applicable PCAP References:	NMED, with support from the New Mexico Energy, Minerals and Natural Resources Department (EMNRD) <i>New Mexico Priority Climate Action Plan (NM PCAP)</i> New Mexico Priority Climate Action Plan , including: <ul style="list-style-type: none"> Appendix K.1 – Inventory and Quantification Methodology Appendix K.2 – Emission Reduction Calculations Appendix K.3 – Quality Assurance Project Plan (QAPP) Appendix L – NM Census Tract Block Groups Identified as LIDAC Appendix M – Identified Stakeholders List https://www.climateaction.nm.gov/climate-pollution-reduction-grant/ CTI Program: See NM PCAP Appendix B, pages 88-98 ECO Schools: See NM PCAP Appendix C, pages 99-112

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2 WORKPLAN

2.a. OVERALL PROJECT SUMMARY AND APPROACH

NMED appreciatively submits this implementation grant application under Phase 2 of the EPA's CPRG program. Building upon the analysis within the NM PCAP (attached in grants.gov), NMED proposes two transformative measures that significantly reduce transportation emissions, reduce school facilities emissions, and meet Justice40 goals by preferentially investing at least 90 percent (%) of charging and fueling infrastructure and zero-emission trucks and buses incentives to benefit people living in low-income and disadvantaged communities (LIDAC). Tribes, Nations, and Pueblos whose sovereign tribal lands fall within New Mexico's borders will also be able to take advantage of the funding opportunities offered through these programs.

The transportation sector emits the largest source of greenhouse gases (GHGs) in the nation and is the second-largest source in New Mexico, behind the oil and gas industry. Mobile source emissions also significantly degrade public health, particularly for those who live in LIDAC. Specifically, in 2021 transportation accounted for 15.3 million metric tons (MT) of CO₂e – 17% of New Mexico's total GHG emissions. Medium- and heavy-duty (MHD) vehicles in New Mexico, which are crucial for the freight sector, contribute to 46%¹ of those transportation-related GHG emissions and 70%² of transportation-related NO_x. These emissions disproportionately impact residents in LIDAC near roads and those who travel along them. To reduce greenhouse gas emissions and improve the health of New Mexicans who breathe these harmful tailpipe emissions, NMED seeks funding for two measures:

The Clean Truck Incentive Program (CTI Program) provides point-of-sale vouchers for fleets to (1) purchase or lease approximately 750 MHD zero-emission trucks (ZETs) and (2) purchase and install approximately 440 charging or fueling infrastructure stations, prioritizing MHD vehicles operating within LIDAC and government fleets.

The Efficient and Clean Operations for Schools Program (ECO Schools) provides funding for (1) approximately 210 charging plugs to expand the uptake of electric school buses (ESBs) in schools that qualify for Title I funding (Title I schools serve low-income students and households) and enable ESB opportunities beyond this effort; (2) approximately 100 ESBs to help Title I schools realize economic and health benefits; and (3) linking the programs with existing energy-saving opportunities through cost-effective energy efficiency and renewable energy generation capital improvements.

New Mexico currently faces social and economic challenges as demonstrated by various indicators. Literacy rates and average income lag national averages, 86% of in-state schools meet Title I status (the third-highest rate in the U.S.)³, and access to quality K-12, technical, and higher education varies widely across communities. New Mexico has the third-highest percentage of families living below the poverty line (13.8%) among all 50 states and the District of Columbia (D.C.), behind only Mississippi and Louisiana. New Mexico is second only to D.C. in the percentage of its population over the age of 16 not in the labor force (42.7%). New Mexico also has the highest percentage of its population receiving food stamps or Supplemental Nutrition Assistance Program benefits (17.5%) and the highest percentage with public health coverage (49.8%).⁴

These are hurdles that the people of New Mexico have a history of overcoming, and CPRG presents a significant opportunity to build on existing transformative initiatives by investing in clean energy investments, sustainable infrastructure, and job training programs. If awarded, New Mexicans will charge ahead, continuing to pioneer the transition towards clean economic prosperity, creating replicable solutions for others.

The landmark Inflation Reduction Act of 2022 (IRA) empowers significant action against the climate crisis through section 137 of the Clean Air Act. The proposed programs in this grant application add critical financial underpinnings to two New Mexico regulatory actions that are more protective of public and environmental health than the federal standards: the adoption of California's Advanced Clean Trucks (ACT) rule⁵ as permitted under section 177 of the Clean Air Act, and the recent approval by the New Mexico legislature of a clean transportation fuel standard. NMED's proposed measures are designed to accelerate ZET adoption and thereby more quickly address disproportionate impacts on the residents in LIDAC. The proposed measures also address the key initiatives of EPA's strategic plan by aggressively reducing GHG emissions and increasing energy and resource efficiency.

Furthermore, this individual application can benefit from and bolster NMED's CPRG Phase 2 coalition application (namely, "Zero40") by expanding access to ZETs and infrastructure within the multi-state, clean corridor proposal. If both applications are awarded, these complementary actions will significantly increase ZET adoption and maximize emission reductions throughout the state and southwest region.

In summary, if awarded funding under the CPRG implementation grants general competition, NMED's two proposed measures represent a strategic and impactful approach to reducing transportation emissions, addressing environmental burdens affecting residents in LIDAC, and creating a cleaner, healthier future for all New Mexicans. NMED affirms that these measures align with the CPRG Program's objectives and the critical, emission-cutting goals of the IRA and Clean Air Act.

2.a.1 Description of GHG Reduction Measures

2.a.1.1 Clean Truck Incentive Program

The proposed CTI Program effectively creates a market lever to boost demand for MHD ZETs by reducing purchasing and infrastructure costs for fleets, including independent owners/operators across the state. This program complements New Mexico's recently promulgated ACT rule that requires manufacturers to increase the proportion of ZETs supplied to the state over time. NMED's approach will significantly shift the market equilibrium by combining the increased supply needed to meet the ACT requirements with a demand-side incentive. The incentives also synergize with New Mexico's programmed clean fuel standard, which will allow fleets that dispense clean fuel like electricity to participate in the clean fuel credit market and generate revenue for business or government operational costs. Furthermore, this measure intends to "stack" incentives on top of other existing subsidies, such as the Commercial Clean Vehicle Credit (§ 45W), which will be applied to costs first. The anticipated result of offering lower costs for fleets is a greater and more rapid uptake of ZET technology across New Mexico, which sits at the crossroads of nationally significant freight corridors.^{6, 7} Key program features include:

- **Outreach and technical assistance:** Through NMED's technical assistance center conducting outreach statewide and providing customized, culturally- and language-appropriate outreach using trusted local organizations to engage with businesses in LIDAC and Tribal communities. To increase access, the center will support interested LIDAC businesses throughout the entire process, including assistance with the application process, site design, utility applications, ZET choices, and infrastructure installation.
- **Fleet assessments:** Providing selected awardees⁸ fleet assessment services to assess the organizations' fleet, identify the most appropriate and cost-effective vehicles to transition to ZET, and sequence future fleet transition.
- **Point-of-sale ZET vouchers:** Covering the price difference between approximately 750 ZETs (including the federal tax credit) and conventional trucks to make options affordable and driving demand. NMED expects to fund approximately 150 Class 2b-3, 500 Class 4-6, and 100 Class 7-8 ZETs.
- **Point-of-sale infrastructure vouchers:** Covering the cost of equipment and supporting installation (accounting for federal and state tax credits) of approximately 440 essential charging stations and hydrogen refueling sites to power ZETs. NMED expects to fund approximately 375 Level 2 chargers and 63 direct current fast chargers (DCFC or Level 3 chargers).
- **Prioritized funding:** Prioritizing vouchers and infrastructure awards for ZETs owned or operated by fleet owners in LIDAC or by local government fleets that serve LIDAC.
- **Small business focus:** Ensuring local and small businesses are prioritized and keep up with the rapid transportation electrification transition by capping large entity awards.
- **Equity incentives:** Prioritizing vouchers in LIDAC and bonus vouchers for women-, veteran-, and minority-owned businesses thus promoting more equitable program outcomes.
- **Public charging/refueling bonus:** Incentivizing, but not requiring, stations that are open to the public expands clean transportation access.
- **Optional scrappage incentive:** Encouraging, but not requiring, the replacement of older, more-polluting internal combustion engine trucks with ZETs.
- **Funding workforce gaps:** Providing funding to the New Mexico Department of Workforce Solutions (NMDWS) for the four local workforce development boards (LWDBs) to provide funding to organizations

and institutions that support workforce development for New Mexicans who face significant employment barriers.

- **Total investment requested in this application:** \$44,480,096 to accelerate ZET adoption, reduce emissions, and create green jobs.

Funding this comprehensive program results in reduced climate pollution, cleaner air, improved public health, increased infrastructure development, and economic growth for New Mexico, with a special focus on benefitting people living in LIDAC and fostering a diverse clean transportation sector.

2.a.1.2 Efficient and Clean Operations for Schools

The proposed ECO Schools measure enables schools to continue the transition to zero-emission operations with support for and without imposing significant risks on the school administration. The ECO Schools measure proposes to fund the installation of approximately 210 ESB charging plugs and to deliver approximately 100 ESBs exclusively to Title I schools across New Mexico. The greater programmatic focus on infrastructure addresses the concern NMED heard from many school bus fleet operators across the state that charging infrastructure must be in place before they can receive ESBs through EPA's Clean School Bus Program. This proposed program emphasizes charging infrastructure, allowing school districts to reduce emissions from ESBs while saving on fueling costs and therefore enabling greater uptake of clean buses in the future after fleet operators experience their use cases. As a local utility company proclaims, "test drives and experience with the technology sell electric vehicles better than any proposed business case."

This measure intends to "stack" incentives on top of other existing subsidies, such as federal tax incentives for vehicles and charging infrastructure, state transferable charging infrastructure tax credits, and utilities' electric vehicle infrastructure incentives. As detailed in the technical appendix, incentives in this program will only be available to applicants once all other existing funding opportunities have been exhausted. Lastly, the measure intends to increase funding to an existing New Mexico Energy, Minerals and Natural Resources Department (EMNRD) program that reduces school facility-related energy costs and greenhouse gas emissions by executing guaranteed energy savings performance contracts with state-qualified energy savings companies. The funds in the ECO Schools will support third-party reviewers who protect the schools by reviewing the energy audit, independently verifying the validity of the proposed capital improvement projects, and assuring that after construction, the energy savings are measured and verified appropriately. By using the existing EMNRD program and qualified energy service companies, schools and school districts will be guided in accessing all available federal, state, utility, and other energy-saving funding options. Key program features include:

- **Technical assistance:** Using the New Mexico Public Education Department (NMPED) network, the NMED technical assistance center will conduct outreach to all Title I schools statewide and the Tribal schools within New Mexico. To best engage the targeted schools, the NMED technical assistance center will customize outreach and engagement materials and methods to be culturally and language inclusive and will support the school through the entire process from application to ESB delivery, successful charging station installation, and implementation of performance-based energy-saving capital improvements.
- **Fleet assessments:** Providing awardees with fleet assessment services will identify the most appropriate vehicles to transition to ESB and lay out a plan for future opportunities.
- **Point-of-sale ESB vouchers:** Covering 100% of the manufacturer's suggested retail price (MSRP) for about 100 ESBs, reducing tailpipe emissions from vehicles operating near highly vulnerable school children.
- **Point-of-sale infrastructure vouchers:** Covering the purchase of equipment and supporting the installation of charging stations to power about 210 ESBs to allow schools to acquire ESBs through this or other funding sources.
- **Energy-saving improvements in school facilities:** Providing technical assistance to connect awardees with EMNRD's building energy-saving programs, existing federal, state, and utility funding, and tax credit opportunities. This funding application seeks additional funding for third-party reviewers to expand the capacity of EMNRD's existing energy-saving capital improvement program.
- **Prioritized funding:** To equitably alleviate the disproportionate health effects of air pollution on residents in LIDAC, all the program's funding will be prioritized for Title I schools, which includes approximately 86% of New Mexico's public schools.

- **Building on existing investments:** Complementing ongoing investments, such as EPA’s Clean School Bus Program and EMNRD Guaranteed Energy Savings Performance Contract (ESPC) program, maximizing impact, and promoting sustainability.
- **Total investment requested in this application:** \$53,316,464 to transform school transportation and building operations, create healthier learning environments, and advance climate goals.

NMED prioritizes this measure because the diesel school bus tailpipe exhaust risks children’s biological, psychological, and emotional development can be disproportionately and deleteriously impacted due to exposure.⁹ ESB adoption is critical for public health and better learning outcomes. Additionally, ECO Schools (1) will help alleviate poor air quality, for the state’s most vulnerable residents - children and seniors, (2) provides accessible job opportunities in the green economy to job seekers living in LIDAC, (3) aligns with the state’s ACT rule to accelerate the adoption of ZETs, which includes ESBs, (4) enables Title I schools to transition to a zero-emissions bus fleet, (5) allows school districts to earn clean fuel credit which translates into a new revenue stream within the programmed clean fuel standard, and (6) creates lived examples for other fleet owners/operators that demonstrate feasibility and benefits.

While each of the measures is explained above, far greater detail about each measure is provided in the NM PCAP, the CTI Program in Appendix B (pages 88-98), and the ECO Schools in Appendix C (pages 99-112). A key advantage of this additional detail is that the information is readily available and will be used to craft the program manuals that will be developed for each measure if awarded. Additionally, many terms used in this application are defined in the NM PCAP.

2.a.1.3 How the CTI Program and ECO Schools Advance CPRG Goals

Goal 1: Implement ambitious measures that will achieve significant cumulative GHG reductions by 2030 and beyond. As demonstrated in section 2.b, the CTI Program and ECO Schools achieve significant GHG reductions in the short- and long-term. These measures dovetail with other New Mexico policies that reduce transportation greenhouse gas emissions including the ACT rule, the Advanced Clean Car II rule, New Mexico’s programmed clean fuel standard, a state light-duty hybrid and zero-emission vehicle tax credit, Governor Michelle Lujan Grisham’s lead-by-example executive order to convert state fleet to ZET by 2035, and \$132 million of federal and state funding for charging infrastructure. Now, demand-side incentives are necessary to efficaciously enact a robust package of policies that will rapidly catalyze the other transportation decarbonization components. New Mexico has received less than \$4 million for 10 ESBs from EPA’s Clean School Bus Program; public school representatives across the state consistently informed NMED that they would not apply for or take delivery of an ESB without first having the charging infrastructure to support it. ECO Schools proposes to rapidly install charging infrastructure so schools can better participate in other programs, like EPA’s. Unfortunately, New Mexicans cannot afford to wait for clean transportation – in 2021, the state had the eleventh-highest death rate from asthma in the US.¹⁰ With the proposed measure, NMED would ambitiously deliver many more ESBs while tapping into an opportunity to connect the fleet transition with building efficiency improvements in one, comprehensive program, allowing schools to maximize benefits and application resources to quickly reduce pollution.

Goal 2: Pursue measures that will achieve substantial community benefits (such as reduction of criteria air pollutants (CAPs) and hazardous air pollutants (HAPs), particularly in low-income and disadvantaged communities. The CTI Program incentivizes decarbonization policies that New Mexico has already adopted, increasing the path toward successful implementation, and decreasing pollutants directly emitted from tailpipes, such as particulate matter (PM_{2.5}) and oxides of nitrogen (NO_x), which concentrate near major roads. People living, walking, and recreating near heavily trafficked roadways – typically residents in LIDAC – generally suffer worse health impacts from poor air quality.¹¹ By 2050, successful implementation of the state’s Advanced Clean Cars II rule is expected to result in nearly 43% lower NO_x, 24% lower PM_{2.5} emissions, and reduced ground-level ozone, improving air quality-related health problems, especially for residents in LIDAC. ECO-Schools reduces diesel tailpipe emissions that children are exposed to every school day. In New Mexico, asthma is one of the most common chronic diseases with an estimated 5.4%¹² to 7.5%¹³ of children afflicted, making them more likely to miss school. Diesel bus tailpipe emissions directly contribute to and exacerbate the disease, so eliminating these emissions will improve child health and reduce absences.

Goal 3: Complement other funding sources to maximize these GHG reductions and community benefits. These measures complement other funding sources such as EPA’s Diesel Emissions Reduction Act (DERA),

Commercial Clean Vehicle Credit via the IRA under Internal Revenue 45W, the State’s newly adopted light-duty electric vehicle incentive program, the State’s newly adopted electric vehicle charging station incentive program, EPA’s Clean School Bus Program, and state and federal incentives for sustainable building components.

Goal 4: Pursue innovative policies and programs that are replicable and can be “scaled up” across multiple jurisdictions. For New Mexicans, the CTI Program enables more ZET access for the first time. The first two battery-electric Class 8 trucks arrived in the state in February 2024; the state partially funded them with EPA DERA funding. More ZEVs in New Mexico through this program build a diversity of use cases that other businesses and governments can learn from and scale up. The CTI Program design replicates and improves upon ZET incentive programs from other states, thus reducing program efficacy risks. Likewise, Title I schools have challenges accessing and applying for opportunities. Thus, the technical assistance center built into ECO Schools eases the burden for under-resourced schools to access pollution-reducing solutions across both transportation and building operations – a novel programmatic model. This innovation creates opportunities for fleet and facility staff to collaborate on solutions for their schools, which can bolster collaborative efforts within school operations to continue implementing sustainable actions beyond CPRG.

2.a.2 Demonstration of Funding Need

CPRG Phase 2 funding is necessary to fully implement the CTI Program and ECO Schools. This point is demonstrated below, where NMED and the state have identified potential federal and non-federal funding sources for the proposed measures. These programs are largely complementary to the proposed measures. The state has not applied for funding to support the two programs proposed herein. Yet, funding these budding measures will help New Mexico establish programs that can solicit federal, state, and other funding in the future. This foundational investment is vital in New Mexico, which has areas a disproportionately high percentage of communities characterized as LIDAC by the EPA.

2.a.2.1 Federal Funding Sources Explored for Both Proposed Measures

Bipartisan Infrastructure Law (BIL) of 2021 (i.e., Infrastructure Investment and Jobs Act or IIJA):

1. U.S. Department of Transportation (U.S. DOT) Federal Highway Administration (FHWA) Charging and Fueling Infrastructure Discretionary Grant Program (CFI Program)¹⁴
 - a. NM received \$67.8 million (FY2024): County of Santa Fe (\$3,371,200); Town of Taos (\$500,000); and New Mexico Department of Transportation (NMDOT; for two ZET charging centers along Interstate-10 in Lordsburg and Vado, NM; \$63,898,809)
 - b. These complementary funds strategically deploy electric vehicle charging infrastructure and other alternative fueling infrastructure projects in three select regions in the state, but they do not address the state-wide issue of the higher, up-front purchasing costs of ZETs or ESBs compared to diesel or gasoline trucks or buses.
2. U.S. DOT FHWA Carbon Reduction Program¹⁵
 - a. NM received \$61.3 million (FY2022-2026): FY2022 actual (\$11,768,818), FY2023 actual (\$12,004,195), FY2024 estimated (\$12,244,278), FY2025 estimated (\$12,489,164), and FY2026 estimated (\$12,738,947).
 - b. These complementary funds are designed to reduce transportation emissions; however, they are awarded to different state and local agencies that do not intend to establish vehicle incentive programs.
3. U.S. DOT FHWA Congestion Mitigation & Air Quality Improvement Program (CMAQ)¹⁶
 - a. NM received \$64.7 million (FY2022-2026): FY2022 actual (\$12,435,524), FY2023 actual (\$12,684,234), FY2024 estimated (\$12,937,919), FY2025 estimated (\$13,196,677), and FY2026 estimated (\$13,460,611).
 - b. These complementary funds are for transportation projects that help meet the requirements of the CAA’s NAAQS for O₃, CO, or PM. While many counties across the state are near the O₃ NAAQS, only a portion of Doña Ana County is in nonattainment of the O₃ NAAQS. Eddy County is not currently a nonattainment area but has had design values above the O₃ NAAQS for the last several years. The Albuquerque area is a Maintenance area for both CO NAAQS. The Anthony area in Doña Ana County is in nonattainment of the PM₁₀ NAAQS. Thus, CMAQ would not enable a statewide program. Therefore,

these measures ensure statewide CAP and GHG emission reductions to avoid crossing those thresholds.

4. U.S. DOT FHWA National Highway Freight Program (NHFP)¹⁷
 - a. NM received \$66.3 million (FY2022-2026): FY2022 actual (\$12,735,586), FY2023 actual (\$12,990,298), FY2024 estimated (\$13,250,104), FY2025 estimated (\$13,515,106), and FY2026 estimated (\$13,785,408).
 - b. These complementary funds can reduce the environmental impacts of freight movement on the National Highway Freight Network (NHFN), but eligible funds do not include vehicles, nor do they support non-NHFN infrastructure projects. In NM, only Interstates 10, 40, and 25 meet NHFN status. The proposed measures will likely result in infrastructure projects mostly outside of those NHFN areas, as both measures permit private (i.e., “behind-the-fence”) infrastructure installation, although there are extra incentives available for installing it publicly.
5. U.S. DOT FHWA Tribal Transportation Program (TTP)¹⁸
 - a. Undetermined funds for New Mexico.
 - b. These complementary funds can reduce transportation emissions within Indian reservations, Indian lands, and Alaska Native Village communities, but the funds do not address statewide mobile source emissions.
6. U.S. DOT FHWA National Electric Vehicle Infrastructure Formula (“NEVI Formula”) Program¹⁹
 - a. NM received \$38.3 million (estimated FY2022-2026).
 - b. These complementary funds reduce transportation emissions by installing light-duty charging infrastructure but generally do not support MHD vehicle infrastructure.
7. U.S. DOT Mega Grant Program (i.e., National Infrastructure Project Assistance program)²⁰
 - a. \$0.
 - b. These complementary funds support large, complex projects that are difficult to fund by other means and likely to generate national or regional economic, mobility, or safety benefits. Vehicle purchase incentives and charging infrastructure are not eligible projects. The CTI Program and ECO Schools do not align well with the funding opportunity.

Energy Independence and Security Act of 2007 and BIL

8. U.S. Department of Energy (U.S. DOE) Smart Grid Grants²¹
 - a. NM received \$82 million (FY2009-2013). \$0 (FY2022-2026): Applications for the first round of funding closed on March 17, 2023. The second round of funding is anticipated to be released in Q1 of FY2024.
 - b. These complementary funds modernize grid infrastructure, deploy smart meters and data networks, integrate renewable energy sources, boost cybersecurity and grid resilience, develop smart grid platforms and analytics, and integrate electric or hybrid-electric vehicles onto the grid. However, these measures do not fundamentally alter or play a significant role in utility grid operations. At most, ECO Schools’ building component can help deploy distributed energy resources.

Inflation Reduction Act (IRA) of 2022

9. U.S. Internal Revenue Service (U.S. IRS) Commercial Clean Vehicle Credit (§ 45W)²²
 - a. Undetermined amount of credits claimed in NM; The IRS is finalizing a form to claim the credit.
 - b. As deemed appropriate, eligible awardees in both the CTI Program and ECO Schools will be required to claim this credit and receive available subsidies. However, the credit may only cover up to 30% (capped at \$40,000) of the cost for vehicles over 14,000 lbs. and is capped at \$7,500 for vehicles under that weight. After accounting for this credit, the incremental cost between electric and diesel Class 2b-3 vehicles (<14,000 lbs.) equals \$12,000. Likewise, the incremental cost after federal incentives for similar Class 4-6 vehicles (>14,000 lbs.) is \$2,400, while Class 7-8 vehicles’ incremental cost after federal incentives are estimated at \$257,500. Thus, the proposed measures will supplement this federal tax credit to enhance demand for ZETs and ESBs.
10. U.S. IRS Alternative Fuel Vehicle Refueling Property Credit (§ 30C)²³
 - a. An undetermined amount of credits claimed in New Mexico.
 - b. These complementary funds assist with the purchase of qualified alternative fueling equipment for installation in qualified locations. As deemed appropriate, eligible awardees will be required to claim this credit to receive subsidies made possible by CPRG funds. This credit may only cover up to 30%

(capped at \$100,000) of the cost of equipment, leaving gaps in funds needed to deploy the infrastructure.

11. EPA Clean Ports Program²⁴
 - a. NM received \$0.
 - b. These complementary funds reduce GHG and CAP emissions, but only in Port operations. These funds cannot enable statewide measures as proposed here.
12. EPA Clean Heavy-Duty Vehicle Program²⁵
 - a. NM received \$0; The NOFO is set to be released in spring 2024.
 - b. These funds to replace existing heavy-duty vehicles with clean, zero-emission vehicles and for zero-emission vehicle infrastructure, workforce development and training, and planning and technical activities complement both measures. If eligible, NMED will seek funding to supplement and expand both measures. However, 40% of the total available funds are earmarked for CAA nonattainment areas. As discussed with the CMAQ program above, these earmarked funds would restrict a statewide program implementation in New Mexico. Therefore, these measures ensure statewide CAP and GHG emission reductions to avoid crossing into nonattainment thresholds. This funding opportunity will be limited to Class 6 and 7 ZETs. In contrast, the CTI Program proposes to fund Class 2b-8 ZETs, which is critical for [1] enabling clean “last-mile” logistics (often performed by Class 2b-5 vehicles) and [2] cleaning up the most-polluting vehicles (Class 8). ESBs typically fall into Class 6, potentially enabling ECO Schools to benefit from future, additional funds. Yet, by funding ECO Schools now, NMED intends to deliver more charging plugs than ESBs to allow fleets to expand their uptake using private or public funds. Given the difference in the number of school buses in the state and the 100 ESBs that ECO Schools expects to activate, additional funds, such as these, will be necessary to fully transition the state’s bus fleet to zero-emission technologies. NMED will continue to consider how these funds may supplement the proposed measures and seek funding in the future accordingly.

Energy Policy Act of 2005, American Recovery and Reinvestment Act of 2009 (ARRA), Diesel Emissions Reduction Act of 2010, and Consolidated Appropriations Act of 2021:

13. EPA Diesel Emissions Reduction Act (DERA)²⁶
 - a. NM received \$4.4 million (FY2008-2024): FY2008 actual (\$196,880), FY2009 actual (\$235,294), FY2009 actual from ARRA (\$1.7 million), FY2010 actual (\$235,294), FY2011 actual (\$189,566), FY2012 actual (\$123,139), FY2013 actual (\$74,303), FY2014 actual (\$79,792), FY2015 actual (\$121,191), FY2016 actual (\$197,058), FY2017 actual (\$0), FY2018 actual (\$412,037), FY2019 actual (\$476,330), FY2020 actual (\$0), FY2021 actual (\$340,748), and FY2022 – FY2024 (undetermined).
 - b. The total funds awarded to New Mexico between FY2008 and 2024 (\$4.4 million) are inadequate to support transformational programs as proposed here. Under DERA, funding must be used for the replacement of MHD vehicles using a reimbursement model. The equipment being replaced must be scrapped or rendered permanently disabled within 90 days of being replaced. NMED considers obligatory scrappage and the requirement to finance the vehicle up front to be a major hurdle, limiting greater uptake of ZETs through DERA, as many fleets are highly resistant and morally opposed to scrapping a truck in good, operable condition. NMED notes low participation in the state’s DERA program likely supports this proposition. Neither measure proposed here requires scrappage, but the CTI Program additively incentivizes fleets to opt into scrappage, taking model year 2009 and older trucks off the road.

2.a.2.2 State Funding Sources Explored for Both Proposed Measures

Income Tax Act (i.e., New Mexico’s 2024 House Bill 252 “Adjust Income Tax Brackets”)

14. “Clean Car Tax Credit Programs” (i.e., Clean Car Income Tax Credit, Clean Car Charging Unit Income Tax Credit, Clean Car Corporate Income Tax Credit, and Clean Car Charging Unit Corporate Income Tax Credit)²⁷
 - a. **2024-26** | EVs: \$3,000 (new) or \$2,500 (used); PHEVs and FCEVs: \$2,500 (new) or \$2,000 (used).
 - b. **2027** | EVs: \$2,200 (new) or \$1,850 (used); PHEVs and FCEVs: \$1,850 (new) or \$1,480 (used).
 - c. **2028** | EVs: \$1,470 (new) or \$1,225 (used); PHEVs and FCEVs: \$1,225 (new) or \$980 (used).
 - d. **2029** | EVs: \$960 (new) or \$800 (used); PHEVs and FCEVs: \$800 (new) or \$640 (used).
 - e. \$25,000 for DC fast chargers, and \$400 for all other chargers.

- f. The Clean Car Income Tax Credit and Clean Car Corporate Income Tax Credit only apply to light-duty vehicles. The Clean Car Charging Unit Income Tax Credit and Clean Car Charging Unit Corporate Income Tax Credit applies to both LD and MHD infrastructure, however, tax-exempt entities may not be able to claim these funds. As deemed appropriate, eligible awardees will be required to claim this credit to receive subsidies made possible by CPRG funds. NMED does not expect these credits to be accessible to expand available funds for the proposed measures.
15. American Rescue Plan Act of 2021
 - a. NMDOT received and has obligated \$10M to public and private entities for the build-out of nearly 90 chargers across New Mexico at 42 locations.
 - b. The funding has been earmarked, making it unavailable for these measures. The network funded by ARPA complements the network that will be built through the proposed measures.
 16. New Mexico 2024 Legislature Funding for NMDOT for (SB275, Section 33)
 - a. \$25M to plan, design, construct, and equip electric vehicle infrastructure statewide
 - b. NMDOT will use the funding to replenish the Transportation Project Fund, which provides grants for charging stations for businesses and communities throughout New Mexico. This state funding is not specifically paired with the purchase of ZETs, which makes it a good complement to these proposed measures.

2.a.3 Transformative Impact

The two measures proposed in this application will incentivize the decarbonization of transportation in the state and especially demonstrate to rural, remote, low-income, and disadvantaged communities that clean transportation is achievable. The programs will improve the quality of life, especially for residents in LIDAC, through cleaner air, jobs, and infrastructure that generates additional economic opportunity.

2.a.3.1 Pioneering, Replicable, and Scalable Policies

CTI Program: The voucher incentive system paired with a fleet advisor, wrap-around technical assistance, and targeted workforce development assistance presents a unique and replicable model for accelerating ZET adoption across other states seeking to transition to clean transportation. This wrap-around approach could become a national benchmark for incentivizing clean technology deployment in LIDAC with significant ancillary benefits of workforce deployment, economic investments, and healthier air quality. With the program systems established through this grant funding, NMED will seek additional funding to amplify the benefits of the newly developed CTI Program.

ECO Schools: This initiative's investment in ESBs and charging infrastructure addresses gaps in current programs which disproportionately impact rural, underserved, and Title I schools. The program targets the least advantaged schools so that those schools reap the cost-saving benefits of reduced fueling and maintenance costs while providing healthier localized air quality. The program also provides significant ancillary benefits to low-income communities through jobs, workforce training, and the economic opportunities that charging infrastructure can bring. With the program established through this grant funding, NMED will seek additional funding to amplify the benefits of the newly developed ECO Schools initiative.

2.a.3.2 Tackling Hard-to-Abate Sectors

CTI Program: The program specifically targets the medium- and heavy-duty truck sector, a notoriously challenging area for emissions reduction due to high upfront costs and ingrained technology dependence. To address the hard-to-abate emissions from medium- and heavy-duty trucks, this program neatly complements the regulatory requirement of New Mexico's ACT rule and the clean fuel credits opportunities of New Mexico's programmed clean fuel standard. Additionally, the infrastructure component of this program will lay the foundation for future charging expansion and pave the way for fleets across New Mexico to understand the opportunities and how to overcome challenges in the transformation of on-road trucking.

ECO Schools: School bus tailpipe emissions are also hard-to-abate due to the budgetary constraints, lack of experience, and operational complexities of public school districts. By demonstrating the feasibility, financial opportunity, and health benefits of electric school buses in selected Title I schools, the program will pave the way for wider adoption and associated emissions reductions, and help the school districts, NM Public Education Department, and NMED learn how to use the systems set up from this program to expand in the future.

2.a.3.3 Market Transformations

CTI Program: By simultaneously increasing ZET supply with the state’s ACT rule and ZET demand with this program, these incentives have the potential to trigger a positive cycle of market transformation. The increased demand could lead to cost reductions for ZETs nationwide, accelerating their adoption and further GHG reductions.

ECO Schools: By providing first-hand experience with ESBs, the program addresses common concerns and encourages wider adoption within the school transportation sector. This can ripple through the broader electric vehicle market, boosting demand and accelerating the transition to cleaner transportation.

2.a.3.4 Additional Considerations

Both programs synergistically align with New Mexico’s ACT rule and New Mexico’s programmed clean fuel standard, creating a comprehensive and potentially transformative approach to ZET adoption. Both programs prioritize engagement with and participation from local people living in disadvantaged communities, fostering equitable economic development and local jobs, and ensuring benefits are broadly shared. By developing public charging stations and opportunities for knowledge sharing between schools and businesses, these programs provide greater access to infrastructure for other ZEVs and provide key word-of-mouth experience sharing to accelerate clean transportation adoption.

2.b. IMPACT OF GHG REDUCTION MEASURES

The subsections below provide estimates of the cumulative emission reductions in metric tons of carbon dioxide equivalent (MT CO₂e) anticipated from the implementation of the proposed measures for two time periods: 2025 – 2030 and 2025 – 2050. Further details on quantification methods, relevant assumptions, annual emission reduction estimates, and any uncertainties associated with the estimates are provided in the Technical Appendix to this application.

2.b.1 Magnitude of GHG Reductions from 2025 through 2030

Implementation of the proposed programs will result in immediate GHG emission reductions (Table 1). New Mexico’s proposed CTI Program and ECO Schools amplify the reduction of transportation emissions by complementing two key transportation policies. New Mexico’s ACT rule requires that manufacturers deliver an increasing percentage of medium- and heavy-duty vehicles to the state through model year 2035. The proposed programs provide financial and logistical support to consumers buying ZETs and ESBs. NMED is prepared to issue vehicle and infrastructure vouchers by Model Year 2027 (beginning January 1, 2026), which is the first year with a ZEV delivery requirement under ACT.

*Table 1. Cumulative GHG Emission Reductions by 2030
Anticipated from Implementing the Measures*

Priority Measure	Cumulative GHG emission reductions (2025–2030)	Cumulative GHG emission reductions attributable to CPRG funding (2025–2030)
CTI Program	74,183 MT CO ₂ e	59,753 MT CO ₂ e
ECO Schools	46,467 MT CO ₂ e	4,306 MT CO ₂ e
Total	120,650 MT CO₂e	64,059 MT CO₂e

Effective deployment of the proposed CTI Program and ECO Schools also support New Mexico’s programmed clean fuel standard, which New Mexico’s Governor signed into law on March 5, 2024. The fuel standard requires a 20% reduction in carbon intensity of transportation fuels by 2030. While the clean transportation fuel standard is agnostic to technology, zero-emission medium- and heavy-duty vehicles will play an important role in reducing the average carbon intensity of transportation fuels in New Mexico and allows awardees from the CTI Program and ECO Schools to sell clean fuel credits from using clean fuels.

2.b.2 Magnitude of GHG Reductions from 2025 through 2050

Implementation of the proposal will result in durable, long-term GHG emission reductions (Table 2). In New Mexico, vehicles have a long life (13.9 years, 1.7 years older than the national average). New Mexico’s school buses are expected to be in service for 12 years. By building financial incentives for ACT and New

Mexico’s programmed clean fuel standard in the short-term, the GHG emission reductions from the two proposed programs front loads emission reductions, and the policies provide durability for the long term. Under the ACT rule, the required percentage of ZEVs continues to increase until model year 2035. In and after model year 2035 the required ZEV percentage of new medium- and heavy-duty vehicles sold will remain constant into the future, at 55% of class 2B-3, 75% of class 4-6, and 40% of class 7-8 vehicles. New Mexico’s programmed clean fuel standard also provides statutory assurance of the durability of GHG emission reductions from these measures, as it requires a 30% reduction of carbon intensity of fuels by 2040.

Table 2. Cumulative GHG Emission Reductions by 2050 Anticipated from Implementing the Measures

Priority Measure	Cumulative GHG emission reductions (2025–2050)	Cumulative GHG emission reductions attributable to CPRG funding (2025-2050)
CTI Program	599,382 MT CO ₂ e	483,299 MT CO ₂ e
ECO Schools	276,367 MT CO ₂ e	30,611 MT CO ₂ e
Total	875,749 MT CO₂e	513,911 MT CO₂e

2.b.3 Cost Effectiveness of GHG Reductions

The budget in this application is cost-effective because it fills funding gaps in New Mexico to successfully implement and prevent rollback of our state’s transportation GHG-reducing policies. The cost-effectiveness of the proposal, inclusive of all measures in this application, is \$1,527 per metric ton of CO₂e reduced, accounting for only CPRG-attributable emission reductions. This funding is also “last-mile” funding that coupled with additional funding from private and public sources, unlocks additional emission reductions. Accounting for total emission reductions enabled by CPRG funding, the cost-effectiveness of the proposal is \$811 per metric ton of CO₂e reduced. Costs associated with each measure are detailed in the budget spreadsheet (attached in grants.gov) accompanying this application and in section 3.a.

2.b.4 Documentation of GHG Reduction Assumptions

The Emission Reduction Calculation spreadsheet and technical appendix that accompany this application detail the emission reduction calculations attributable to the proposed measures. Using the AFLEET tool from Argonne National Laboratory and the anticipated number of vehicles replaced with the programs, the calculations estimate the difference in emissions between gasoline or diesel vehicles and electric vehicles. NMED based the emission reductions from school facility improvements on energy-saving capital improvements completed through EMNRD’s Guaranteed Energy Savings Performance Contract program.

2.c. ENVIRONMENTAL RESULTS – OUTPUTS, OUTCOMES, AND PERFORMANCE MEASURES

The measures detailed in this proposal directly support Goal 1, “Tackle the Climate Crisis”, Objective 1.1, “Cut pollution that causes climate change and increases the adaptive capacity of Tribes, states, territories, and communities”, of the EPA’s Strategic Plan.²⁸ Each of the measures included in this proposal will significantly decrease greenhouse gas emissions while benefiting communities throughout the state of New Mexico, specifically Tribes, Nations, and Pueblos, and those municipalities and counties in the state that have limited capacity to seek, apply for, and implement funding opportunities. The proposed measures support the EPA’s Strategic Plan through the outputs and outcomes listed below.

2.c.1 Expected Outputs and Outcomes

2.c.1.1 Outputs

2.c.1.1.1 Equipment or Technology Installations

In total, the CTI Program will enable 150 Class 2b-3 ZET vouchers, 500 Class 4-6 ZET vouchers, 100 Class 7-8 ZET vouchers, 375 Level 2 chargers, and 63 Level 3 chargers (i.e., DCFC). ECO Schools will enable 210 Level 2 and 3 chargers, 100 ESBs, and 50 total services (valued at \$1 million) for building energy efficiency improvements. While these estimates reflect the best available data, the actual amount of enabled equipment will likely vary. See the Technical Appendix for assumptions on calculations for the numbers of equipment distributed.

2.c.1.1.2 Staff Hired to Implement Measures

To adequately staff the measures over the five-year performance period, the CTI Program will be supported by four positions: One NMED Program Manager, Two NMED Program Coordinators (level II), and One NMED Program Coordinator (level I). Similarly, ECO Schools will be supported by three positions: One NMED Program Manager, One NMED Program Coordinator (level II), and One NMED Program Coordinator (level I).

2.c.1.1.3 Semi-annual Progress Reports

NMED will submit semi-annual progress reports to the EPA on work plan progress, the status of implementation, preliminary metrics for tracking progress, preliminary metrics for tracking transformative impact, and next steps.

2.c.1.1.4 Detailed Final Report

NMED will submit a detailed final report to the EPA with the final status of implementation, metrics for tracking progress, metrics for tracking transformative impact, and next steps.

2.c.1.2 Outcomes

2.c.1.2.1 Emission Reductions

Table 3 provides the reductions in annual and cumulative criteria pollutant and hazardous air pollutant emissions in New Mexico from the measures proposed herein.

Table 3. Reductions in Statewide Annual Criteria Pollutant and Hazardous Air Pollutant Emissions

Pollutant and Period		CTI Program	ECO Schools	Total
NOx	Annual 2030 (tons/yr.)	30.4	8.4	38.8
	Cumulative 2025-2030 (tons)	60.8	22.8	83.5
	Cumulative 2030-2050 (tons)	455.7	172.7	628.4
PM2.5	Annual 2030 (tons/yr.)	0	0	0.3
	Cumulative 2025-2030 (tons)	0	0.1	0.6
	Cumulative 2030-2050 (tons)	4	0.8	4.4
SO2	Annual 2030 (tons/yr.)	0.2	0.3	0.6
	Cumulative 2025-2030 (tons)	0.5	1	1.5
	Cumulative 2030-2050 (tons)	3.4	8.2	11.6
VOC	Annual 2030 (tons/yr.)	2.1	0.2	2.3
	Cumulative 2025-2030 (tons)	4.3	0.3	4.6
	Cumulative 2030-2050 (tons)	32.1	2.3	34.4

2.c.1.2.2 Public Health Benefits

In New Mexico only, the reduction in select CAPs (i.e., PM_{2.5}, NO_x, SO₂, & VOCs) from these measures may result in 424 fewer health-related incidences and more than \$8 million in cumulative health savings by 2050 (Table 4).

2.c.1.2.3 High-quality jobs created throughout New Mexico's jurisdiction and in LIDAC

In collaboration with E3 Consulting, NMED developed job estimates by multiplying expenditures on each initiative by industry-specific coefficients for direct, indirect, and induced jobs from the Zero Carbon Consortium (2020).²⁹ In NM, NMED estimates the CTI Program will create 140 direct, 140 indirect, and 163 induced high-quality jobs, and ECO Schools will create 256 direct, 265 indirect, and 330 induced high-quality jobs.

*Table 4. Cumulative Health Benefits of Emissions Reductions by 2050**

	Reduced Mortality	Reduced Health Incidence	Monetary Value of Health Benefits (2017 dollars)
CTI Program	0.570	328	\$6,355,740
ECO Schools	0.165	96	\$1,856,048
Total	0.735	424	\$8,211,788
* See section 4.c for methodology and details.			

The workforce solutions proposed herein strategically target LIDAC. NMED conservatively estimates that roughly 90% of the jobs created from the CTI Program and ECO Schools will be filled by workers living within LIDAC, based on the strong LIDAC focus of the grant funding. In New Mexico's LIDAC analysis, NMED estimates the CTI Program will create 84 direct, 84 indirect, and 97 induced high-quality jobs, and ECO Schools will create 152 direct, 158 indirect, and 197 induced high-quality jobs.

2.c.1.2.1 Reduced TCO for fleet owners, operating in LIDAC

The effective total cost of ownership (TCO) over a twelve-year lifecycle for 100 ESBs will be more than 58% lower for awardees than if they procured diesel school buses in the absence of this program (Table 5).³⁰ Recipients would directly benefit from a \$0 purchase price for ESBs, compared to a \$100,000 purchase price for diesel buses, plus financing costs. This tangible outcome would save awardees \$25,826,106 in total to reinvest in their schools, for example, for energy efficiency projects and program development, curriculum support, or improved staffing.

Likewise, the CTI Program also significantly reduces the Total Cost of Ownership for MHD vehicle fleet owners (Table 6). For example, compared to diesel, one Class 8 electric truck procured through this measure will result in savings totaling \$583,616 over fifteen years. These lower TCOs persist for all categories of MHD ZETs, and savings primarily aggregate from reduced fuel and maintenance costs throughout the ZETs operation, but more importantly, the upfront purchasing costs are reduced from federal incentives, first, and then this CTI Program.

Table 5. Effective Total Cost of Ownership for 100 ESBs Delivered to Awardees Through ECO Schools, Over a 12-Year Period

Cost Category	Diesel	Electric
Financing	\$1,662,809	\$0
Depreciation	\$7,142,555	\$0
Fuel	\$9,805,295	\$3,217,483
Diesel Exhaust Fluid	\$148,771	\$0
Maintenance	\$20,710,234	\$12,375,030
Insurance	\$4,813,628	\$2,864,671
License	\$176,345	\$176,345
TCO	\$44,459,635	\$18,633,529

Table 6. TCO (for One Vehicle in Each Class Group) Procured Through the CTI Program, Over 15 Years

Cost Category	Class 2b-3 (Light Commercial Truck)		Class 4-6 (Single Unit Short-Haul)		Class 7-8 (Combination Short-Haul)	
	Diesel	Electric	Diesel	Electric	Diesel	Electric
Financing	\$8,813	\$8,813	\$11,640	\$11,640	\$21,617	\$21,617
Depreciation	\$45,335	\$45,335	\$55,059	\$55,059	\$102,253	\$102,253
Fuel	\$74,535	\$27,846	\$141,941	\$37,756	\$807,678	\$271,469
Diesel Exhaust Fluid	\$1,123	\$0	\$2,139	\$0	\$12,171	\$0
Maintenance	\$153,625	\$66,033	\$68,140	\$45,398	\$241,588	\$206,353
Insurance	\$21,723	\$21,723	\$58,868	\$58,868	\$128,789	\$128,789
License	\$1,930	\$1,930	\$2,115	\$2,115	\$2,115	\$2,115
TCO	\$307,086	\$171,680	\$339,902	\$210,836	\$1,316,211	\$732,595

2.c.1.2.2 Environmental Benefits

The CTI Program and ECO Schools measures will both have significant environmental benefits, including improvement of air quality, water quality, soil quality, and ecological health. By reducing the use of fossil fuels, the measures decrease the contamination of surface and ground water throughout the "well to wheel" system. This includes crude oil leaks and spills at production sites, in collection, refining, and distribution pipelines from storage tanks, and the end use in internal combustion engines. Contamination can lead to surface water, ground water, and soil quality degradation, potentially driving ecological habitats below the standards humans, fish, and

wildlife require for health and survival. These measures decrease harmful air pollution including nitrogen oxides, particulate matter, and carbon monoxide.

2.c.1.2.3 Lower energy demand and commercial energy expenditures

By connecting schools with EMNRD's Guaranteed Energy Savings Performance Contracts program for investment-grade energy audits and financing of capital improvement for efficiency upgrades and on-site renewable energy generation and storage, school districts will need less energy and, consequently, pay less for their utilities. Since all the proposed program funds are prioritized for school districts serving low-income students and families, the jobs and financial advantages center the benefits in the communities that need them most. The focused funding may help normalize clean transportation options and the expectation of clean air and good health in communities that have traditionally been underserved. The program will also reduce New Mexico's energy demand on the grid.

2.c.1.2.4 Increased resilience to climate change impacts

Guiding schools in the process of on-site renewable energy generation and storage, including using the power from the ESB's battery, will increase community resilience to weather emergencies, which are projected to increase in frequency from climate change. Resiliency hubs, like schools with independent power generation and storage from ESBs, can generate power in the event of power loss from the grid and serve as an anchor for the community and emergency services.

2.c.2 Performance Measures and Plan

NMED has established the following performance measures for monitoring output of both measures during the first five years, post-award with a focus on direct impacts and program utilization. NMED will provide a status update for each performance measure to EPA in the semi-annual reports and final report.

- Charging Station Operational Status:
 - Track the number of functioning stations and any technical issues encountered.
 - Analyze charging patterns to optimize station placement and future deployments.
 - Identify the number of charging stations in LIDAC.
 - Track jobs created, including jobs in LIDAC and Tribal communities, for installation and maintenance of charging stations.
 - Track the number of workers successfully trained and certified/licensed to fill jobs created for the installation and maintenance of charging stations, including residents from LIDAC and Tribal communities.
- ZET and ESB Utilization:
 - Collect vehicle miles traveled data by truck/bus and route to understand operational patterns and target potential expansion.
 - Identify the number of ZETs and ESB domiciled or largely operating LIDAC or Tribal communities.
 - Calculate and report specific reductions in GHG, NOX, SO₂, PM_{2.5}, and PM₁₀ based on VMT and emission factors.
 - Track the number of workers obtaining commercial driver's licenses (CDLs) and/or existing CDL holders trained to operate ZETs, including residents from LIDAC and Tribal communities
- In collaboration with NMPED and local school districts, track the number of workers obtaining Class-B CDLs and/or existing Class-B CDL holders trained to operate ESBs, including residents from LIDAC and Tribal communities.
 - Track the number of workers obtaining Automotive Service Excellence (ASE) certifications and/or existing ASE holders trained to work on ZETs and ESBs, including residents from LIDAC and Tribal communities.
- ECO Schools only - Energy Savings Performance Contracts (ESPC):
 - Track and report actual cost savings and reductions in energy use for participating schools.
 - Report on implemented energy-saving technologies and project costs for future replication.
 - Identify the number of EPSCs for Title I and Tribal schools.
 - Track the number of workers obtaining American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE), North American Technician Excellence (NATE), or other

certifications to provide building heating, ventilation, and air conditioning (HVAC) and energy efficiency upgrades, including residents from LIDAC and Tribal communities.

- Track the number of workers obtaining PV solar installation certifications from the North American Board of Certified Energy Practitioners (NABCEP) or other bodies, including residents from LIDAC and Tribal communities.
- Monetary Savings of Interventions:
 - Compare annual operational costs of ZETs, ESBs, and ESPC projects to traditional alternatives (e.g., ICE vehicles and standard energy use) to quantify direct financial benefits, including the benefits going to Title I or Tribal schools.

NMED will continue to track long-term program outcomes of electric fleet growth, including the number, type, and distribution of charging stations and ZETs and ESBs added to fleets across the state and the characteristics of fleets adopting EVs (e.g., rural/urban, fleet size). By tracking these trends, NMED will be able to identify factors influencing adoption and develop outreach and processes to better align future program funding with anticipated.

2.c.3 Authorities, Implementation Timeline, and Milestones

2.c.3.1 Authority

NMED proposes to implement the CTI Program and ECO Schools measures by issuing vouchers via a subsidy program, utilizing a Participant Support Costs model pursuant to 2 CFR § 1500.1. NMED is authorized under the state Air Quality Control Act, NMSA 1978, Sections 74-2-1 to -17, to accept, receive, and administer grants or other funds or gifts from public and private agencies, including the federal government. In the alternative, NMED would plan to implement the subsidy programs using a reimbursement model, though this would likely create financial hardship and other barriers for program beneficiaries, counteract efficient implementation of the programs, and delay the realization of/thwart GHG reductions.

2.c.3.2 Implementation Timeline and Milestones

Table 7 details the implementation timeline for the proposed CTI Program, which has a period of performance from October 2024 to December 2029. The grant period will begin when the grant funding is received, which

Table 7. Clean Truck Incentive Program Implementation Timeline and Milestones (included in budget spreadsheet)

Calendar Year	2024				2025				2026				2027				2028				2029			
Calendar Year Quarters	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Quarters since award			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
Activities and Milestones, indicated by an ¹ *																								
1 Submit Application	*																							
2 Receive Award			*																					
3 Hire a Program Manager and 3 Program Coordinators			*																					
4 Selection of a fleet advisor through competitive procurement			*																					
5 Submit Quality Assurance Program Plan (QAPP) to EPA			*																					
6 Preparation program manual, application, training materials, terms and conditions for participating dealerships and station installers, and promotional materials with outreach around these materials																								
7 Provide Workforce Solutions Department funding for job development			*																					
8 Certification of medium and heavy-duty vehicle vendors and infrastructure installers																								
9 Outreach, education, community and fleet engagement including program design, forms and manuals, opportunities																								
10 Launch Technical Assistance Office			*																					
11 Advertise application requirements and solicit applications																								
12 Application deadline for each round					*				*				*				*							
13 Review applications, determine eligibility, prioritize applicants through Title I focus, select awards, and enter into agreements with project sponsors																								
14 Fleet Advisor provides technical assistance to project awardee																								
15 Disburse participant support costs to vehicle and installation vendors																								
16 Charging installations completed and ZET delivered									*				*				*			*				
17 After each evaluation performed, revise program manual, promotional materials, and application as needed in response to participant and community feedback																								
18 Seek additional incentive funding																								
19 Track and review performance measures																								
20 Submit semiannual reports, including performance measures				*		*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
21 Submit final report																							*	

EPA has announced will be October 2024, and run for the five years EPA has specified, plus an extra two months to complete 4 cycles of applications and evaluation. Milestones are indicated by asterisks. The timeline is also included in its original format in the budget spreadsheet file. Table 8 details anticipated risks associated with implementing the measure and mitigation strategies for each risk.

Table 8. Clean Truck Incentive Program: Risks and Mitigation Strategies

Risk	Effect on Pollution Reduction and Program Efficacy	Mitigation Strategy
Delays in hiring the program staff	Delays may reduce cumulative GHG emission reductions in the near-term (2025 – 2030) with minimal impact out to 2050	Begin the hiring process between announcements of awardees and receipt of assistance agreement to build in more time
Delays in hiring the program fleet advisor through the procurement process	Delays may reduce cumulative GHG emission reductions in the near-term (2025 – 2030) with minimal impact out to 2050	Develop request for proposals documentation between announcements of awardees and receipt of assistance agreement to build in more time
Program undersubscribed in LIDAC and other areas	Anticipated climate and air pollution reductions may not occur in LIDAC	Assess past approaches and develop new strategies to better reach potential awardees in LIDAC
Lack of affordability of new truck even after voucher is applied	Even with price parity vouchers, ZETs may still be more expensive than traditional trucks, reducing their uptake	Ensure affordability by encouraging fleets to procure ZETs below the program’s caps and providing technical assistance on federal ZET tax incentives will be crucial for widespread adoption
Limited access to charging infrastructure	The program's effectiveness hinges on the availability of charging stations and hydrogen refueling stations, particularly in LIDAC neighborhoods	Target investments are needed and supported by this program to avoid exacerbating existing infrastructure disparities. Program coordinators can assist applicants in identifying and securing funding from other sources
Lack of workforce training and development for residents of LIDAC	LIDAC residents need access to training programs and resources to prepare them for the new jobs created by the program	Through trusted community voices, amplify coordination with community colleges, vocational training centers, and organizations in LIDAC communities to provide wrap-around workforce development services focused on residents of LIDAC
Ineffective community and fleet engagement, outreach, and education	Active and culturally appropriate engagement with fleets and residents in LIDAC is essential to ensure communication about the measure and that the program is designed to meet their needs and address their concerns	Enlist the assistance of skilled communication specialists and seek additional trusted community voices to reach fleet managers. Use state networks to conduct one-on-one contact.

In Table 9, NMED details the implementation timeline for the key tasks in the proposed ECO Schools, which has a period of performance from October 2024 to December 2029. Milestones are indicated by asterisks. The timeline is also included in its original format in the budget spreadsheet file. Table 10 details anticipated risks associated with implementing the measure and mitigation strategies for each risk.

Table 9. CTI Program Implementation Timeline and Milestones (included in budget spreadsheet)

Year	2024			2025				2026				2027				2028				2029			
Quarter	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Quarters since award			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Activities and Milestones, indicated by an '*'																							
1 Submit Application	*																						
2 Receive Award			*																				
3 Hire a Program Manager and 2 Program Coordinators			*																				
4 Selection of a fleet advisor through competitive procurement			*																				
5 Selection of energy savings third party reviewers			*																				
6 Submit Quality Assurance Program Plan (QAPP) to EPA			*																				
7 Provide Workforce Solutions Department funding for job development			*																				
8 Preparation of a program manual, application, training materials, terms and conditions for participating dealerships and station installers, and promotional materials with outreach around these materials																							
9 Certify school bus vendors and infrastructure installers																							
10 Outreach, education, community and school engagement including program design, forms and manuals, opportunities																							
11 Launch of Technical Assistance Office				*																			
12 Advertise application requirements and solicit applications																							
13 Application deadline for each round					*				*			*				*							
14 Review applications, determine eligibility, prioritize applicants through Title I focus, select awards, and enter into agreements with project awardees																							
15 Fleet Advisor provides technical assistance to project sponsors																							
16 Schools work with ESCOs on energy savings performance contracts																							
17 Disburse PSC to Vehicle Vendor and Installation Vouchers																							
18 Charging Installations Completed and ZEB Delivered									*			*				*				*			*
19 After each evaluation performed, revise program manual, promotional materials, and application as needed in response to participant and community feedback																							
20 Seek additional incentive funding																							
21 Track and review performance measures																							
22 Semiannual Reporting, including performance measures				*		*		*		*		*		*		*		*		*		*	
23 Final Reporting																							*

Table 10. ECO Schools: Risks and Mitigation Strategies

Risk	Effect on Pollution Reduction and Program Efficacy	Mitigation Strategy
Delays in hiring the program staff for the technical assistance center	Delays may reduce cumulative GHG emission reductions in the near-term (2025 – 2030) with minimal impact out to 2050	Develop hiring paperwork between announcements of awardees and receipt of assistance agreement to build in more time
Delays in hiring the program fleet advisor through the procurement process	Delays may reduce cumulative GHG emission reductions in the near-term (2025 – 2030) with minimal impact out to 2050	Develop request for proposals documentation between announcements of awardees and receipt of assistance agreement to build in more time
Limited response from Title I school outreach and engagement	Active engagement with Title I schools is essential to ensure the measure meets their needs and addresses their concerns	Improve the targeted and culturally appropriate outreach material about the benefits of the program and methods for reaching the school fleet and facilities managers, including one-on-one visits
Program underutilized because of complex application processes	Title I schools often struggle to secure funding opportunities that are cumbersome or complex, which can further disadvantage low-income districts that may lack	Streamline the application process and adequately staff and train the technical assistance center to minimize strains on the limited resources of Title I schools.

	the staff to navigate the bureaucratic hurdles	
Program undersubscribed in Title I schools in certain areas	Climate and air pollution reductions may not occur in LIDAC and across the state as anticipated	Track applicant locations and prioritize appropriate outreach, technical assistance, application reviews, and awards to Title I schools
Lack of workforce training and development for residents of LIDAC	LIDAC residents need access to training programs and resources to prepare them for the new jobs created by the program.	Through trusted community voices, amplify coordination with community colleges, vocational training centers, and organizations in LIDAC communities to provide wrap-around workforce development services focused on residents of LIDAC

2.d. LOW-INCOME AND DISADVANTAGED COMMUNITIES

The issue of equity and underserved communities are acute in New Mexico as highlighted in the introduction of the measures in this proposal. 27 of New Mexico's 33 counties have a poverty rate for families that is above the 8.9% national average. The state's highest poverty rates are in McKinley County (29.0%) and Cibola County (24.1%) in the northwest, followed by Luna County in the south (21.5%). All the state's counties except Los Alamos County have a median household income that is below the national level of \$74,755 per year, and 13 of its 33 counties have a median household income of below \$40,000 per year.

New Mexico communities also have a long history of being overburdened with environmental or climate issues. Extensive fossil fuel operations, mining and milling of uranium and copper, and water contamination have impacted the Tribes, Nations, Pueblos, and other communities in New Mexico for generations.

For the CPRG program, instead of the Climate and Economic Justice Screening Tool, NMED utilized the EPA IRA Disadvantaged Communities layer in EJScreen to analyze and identify which census tracts within New Mexico are categorized as Low-Income and Disadvantaged Communities (LIDAC). This identification informed and guided NMED's efforts throughout the community engagement and outreach process, and guided our work to determine where to focus the proposed measures to ensure maximum benefit to those communities that need them most.

2.d.1 Community Benefits

2.d.1.1 Anticipated Benefits

The implementation of the measures included in this application is designed specifically to provide significant benefits to people living in LIDAC (Table 11), including the anticipated number of high-quality jobs to be created in LIDAC as a result of the proposed measures. A list of all LIDAC census tracts affected by this proposal is included as an attachment to this application.

Table 11. Anticipated Benefits of Proposed Measures to Residents of Low-Income and Disadvantaged Communities

Priority Measure	Areas Benefited	Area-Specific Input Opportunities	Anticipated Benefits
CTI Program	Statewide, with prioritization of implementation in LIDAC.	Statewide, with a focus on LIDAC, including recurring Tribal engagement; Gallup, Bayard, and Tucumcari, NM in-person public meetings; virtual statewide meetings;	<ol style="list-style-type: none"> 1. Improved air quality. 2. Equitable opportunities for fleets owned and operated within LIDAC. 3. Significant cost reductions prioritizing women-owned, minority-owned, and small businesses. 4. Enhanced community health. 5. Job creation and job quality improvements.

		survey and phone banking results by zip code.	6. Noise and odor reduction.
ECO Schools	Statewide, with prioritization of implementation in LIDAC.	Recurring Tribal engagement; Gallup, Bayard, and Tucumcari, NM in-person public meetings; virtual statewide meetings; survey and phone banking results by zip code.	<ol style="list-style-type: none"> 1. Serving Title I and tribal schools. 2. Improved air quality for the state's most vulnerable population. 3. Enhanced community health. 4. Enabling action to encourage greater uptake of zero-emission buses. 5. Economic benefits and tangible cost savings for schools that can be reinvested in students' success. 6. Job creation and job quality improvements.

With the workforce development components of this application, NMED estimates that approximately 90% of the quality jobs created from the Clean Truck Incentives and ECO Schools will be filled by people living and working in LIDAC, given that over 90% of grant funds will be spent in LIDAC communities. Similarly, NMDWS will focus on job training and opportunities for residents in LIDAC, resulting in a total of 772 direct, indirect, and induced jobs from the two incentive programs (Table 12).³¹

Table 12. High-Quality Jobs Created in New Mexico's LIDAC

Total High-Quality Jobs in New Mexico's Low-Income and Disadvantaged Communities			
	Direct	Indirect	Induced
ECO Schools	152	158	197
Clean Trucks	84	84	97

2.d.1.2 Assessment of Benefits Throughout Implementation Period

NMED will assess, quantify, and report a more thorough analysis of associated community benefits based on actual data collected during implementation. NMED will include the results of these assessments in semi-annual reports to EPA and make the information publicly available. NMED will track the following progress metrics in and near identified LIDAC census tracts to quantify the reduction in GHG emissions and co-pollutant emissions and other community benefits:

Clean Truck Incentives Program:

- Planned and actual operating routes for trucks,
- Number/rate/character of truck routes,
- Number/rate/character of trucks added and removed from fleets, &
- Number/rate/character of vehicle miles traveled.

ECO Schools:

- Number of Charging Stations Deployed and Operational Status,
- Electric School Bus (ESB) Utilization,
- Energy Reductions from Energy Savings Performance Contracts (ESPC), &
- Monetary Savings of Interventions.

2.e. COMMUNITY ENGAGEMENT

NMED performed extensive community outreach, prioritizing residents of LIDAC, during the development of the measures contained in this proposal as part of the NM PCAP development process. NMED used the following strategies for engagement with community leaders and residents of LIDAC to seek their input on the development of the measures included in this proposal:

- Developing a state CPRG webpage: <https://www.climateaction.nm.gov/climate-pollution-reduction-grant/>;
- Engaging Center for Civic Policy (CCP) as a community outreach contractor to work with NM Prospera for NM PCAP outreach. NM Prospera is "a coalition of grassroots economic, social and environmental justice organizations...working to diversify the state's economy while creating thousands of jobs for communities most impacted by climate change;"

- With CCP, hosting an online survey (<https://nmprospera.org/crpg-community-input-survey/>) for collecting feedback on NM PCAP priorities;
 - Available in English and Spanish,
 - CCP encouraged survey participation through targeted outreach to member community-based organizations, social media, push cards, and flyers,
 - CCB released an alert to its 3,000+ listserv subscribers,
 - On February 9, 2024, NM Prospera and CCB spoke to the public and distributed push cards at Environment Day during the 2024 Legislative Session, and
 - CCB attended community events to disseminate information on how community members could provide input;
- With CCP, hosting a phone and text survey for collecting feedback on the NM PCAP priorities;
 - Available in English and Spanish,
 - The phone universe consisted of 164,000 New Mexico residents including both cell phone and landline numbers. 50,705 contacts were made from that list through multiple attempts to each number.
- Engaging with rural New Mexico LIDACs at CCP-organized in-person community meetings in Bayard, Gallup, and Tucumcari, NM;
- Presenting at and participating in a statewide virtual meeting organized by CCP;
- Holding recurring and ongoing monthly meetings with Tribes that received Phase-1 CPRG funding;
- Meeting with all Tribes that were not awarded Phase-1 CPRG funding, with one-on-one follow-up meetings with Tribes interested in continuing the CPRG discussion;
- Discussing opportunities and overlap with metropolitan and rural transportation planning organizations;
- State agency outreach including NMDOT, NMDWS, NMPED, New Mexico Economic Development Department, New Mexico Mortgage Finance Authority, and others;
- Presenting to local city, town, and county governments through meetings with the Coalition of Sustainable Communities New Mexico (cities of Las Cruces, Albuquerque, Santa Fe, and counties of Los Alamos, and Santa Fe), the New Mexico Municipal League, and NM Counties; and,
- Collaborating in a workshop with the NM Sustainable Economy Advisory Council, which includes representatives of disproportionately impacted communities or organizations and representatives from Tribal governments.
- See NM PCAP for a detailed log of engagement efforts.

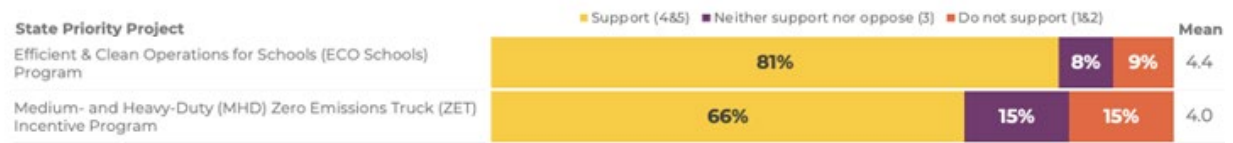
2.e.1 Summary of Input Collected Through Surveys and Community Meetings

NMED worked with the Center for Civic Policy and the Nuevo Mexico Prospera Coalition to meaningfully engage the communities of New Mexico on the proposed projects. An online survey, phone survey, and four public meetings were conducted to ensure engagement efforts reached all parts of the state. Valuable conversation on the potential impacts of the proposed measures on the unique communities of New Mexico aided significantly in the development of the measures as presented in this application. A summary of this feedback is below. However, please see the NM PCAP, Appendix N, for a more detailed report of the feedback received, including written responses on potential benefits, disbenefits, support, and concerns. NMED incorporated the verbal and written responses received throughout the engagement process, in conjunction with the survey data collected, by focusing approximately 90% of the requested funding into supporting the residents of LIDAC and by choosing measures that improve health and create jobs. NMED will continue to inform our efforts on engagement surrounding these measures before and throughout implementation.

2.e.1.1 Online Survey Results

435 community members responded to the online survey, deployed from January 25 to February 17, 2024. The survey was offered in both English and Spanish. The survey requested the respondents to rank their support for the proposed measures from one to five, with one being the least supportive and five being the most supportive (Table 13).

Table 13. Online Survey Results for Support of Proposed Measures



The ECO Schools measure received a mean support rating of 4.4 out of 5, with 81% of participants responding supportively. The CTI Program received a mean support rating of 4.0 out of 5, with 66% of participants responding supportively.

2.e.1.2 Phone Survey Results

1,229 community members responded to the phone survey. The phone universe consisted of 164,000 New Mexico residents including both cell phone and landline numbers. 50,705 contacts were made from that list after multiple attempts at each number. Both English and Spanish language scripts were used. The survey requested the respondents to rank their support for the proposed measures from one to five, with one being the least supportive and five being the most supportive (Table 14).

Table 14. Phone Survey Results for Support of Proposed Measures



The ECO Schools measure received a mean support rating of 4.4 out of 5, with 67% of participants responding supportively. The CTI Program received a mean support rating of 4.0 out of 5, with 65% of participants responding supportively.

2.e.1.3 Public Meeting Results

NMED convened four public meetings in collaboration with the Nuevo Mexico Prospera Coalition, to solicit input on the proposed measures for the NM PCAP. One meeting was held virtually and the other three were held in person in Bayard, Gallup, and Tukumcari. The numbers of participants were: Bayard (7), virtual statewide meeting (103), Gallup (34), and Tukumcari (28), totaling 172 attendees. Participants were requested to list potential benefits, questions, or challenges associated with the proposed transportation measures in the NM PCAP during an in-person or virtual gallery walk after the presentation (Table 15).

Table 15. Public Meeting Results for Support of Proposed Measures



NMED received comments that prefer the measures that **directly** support residents of LIDAC and that NMED continues active engagement in communities throughout New Mexico. NMED chose the two measures in this application because they significantly support LIDAC. NMED remains committed to clarifying in greater detail how the measures create jobs and improve health during the community engagement associated with the implementation of the CTI Program and ECO Schools. Please see the NM PCAP, Appendix N, for details on specific comments participants had for each proposed measure. The Tukumcari meeting was not held in time for that feedback to be included in the NM PCAP report, however, it is included here. Community input informed the development of the measures in this application and will continue to inform program implementation.

2.e.1.4 Continued Meaningful Engagement

As described in the description for each measure included in this proposal, NMED intends to continue meaningful engagement with residents of LIDACs throughout and following implementation. NMED will seek input from the NM Sustainable Economy Advisory Council, which is comprised of representatives of disproportionately impacted communities or organizations and representatives from Tribal governments, during the development of promotional materials, guidance, and other materials. NMED will retain contractual assistance in developing, organizing, and implementing the following engagement efforts throughout the implementation period of the proposed measures:

1. Developing education efforts and disseminating information and resources in advance of and during the application period of the pass-through grants outlined in each proposed measure;
2. Developing an outreach and engagement strategy that uses a wide variety of techniques to create early, frequent, and continuing opportunities for community engagement, which ensures inclusion of various linguistic, cultural, institutional, geographic, and other perspectives;
3. Creating a transparent planning process that also provides the opportunity for early community risk mitigation;
4. Holding community consultations or public input meetings;
5. Providing a publicly accessible list of all upcoming community engagement opportunities (e.g., listening sessions, outreach, questions and answers sessions, door-to-door visits, and community meetings);
6. Soliciting input from residents of LIDAC on how the program application and implementation processes are going and adjusting those strategies as appropriate; and,
7. Report back to communities throughout the performance period about how we used their input to adjust our program plans and implementation.

2.f. JOB QUALITY

The CTI Program and ECO Schools will create a demand for workers with a range of specializations and certifications. The CTI Program and ESB component of ECO Schools require certified construction workers, heavy equipment operators, engineers, project managers, and above all certified electricians for the installation of EV charging infrastructure throughout the state. They will also increase demand for certified EV mechanics, EV bus and truck repair technicians, and commercial driver's license (CDL) holders trained to operate EVs. The building component of the ECO Schools will directly employ workers with certification for PV solar and wind installation, building maintenance, as well as heating, ventilation, and air conditioning (HVAC) projects.

Conversations with key stakeholders at community colleges in LIDAC, non-profits, private companies, labor organizations, researchers, Workforce Boards, and partner agencies all point to critical skills gaps and labor shortages in these areas. Demand in the electric, building, and repair trades from tech companies and energy producers has shifted the policy lens to the shortage of journeymen electricians certified to install and maintain EV charging stations, as well as project managers, heavy equipment operators, engineers, and construction workers trained to work on both charging station installation and school building improvements. NMDWS Labor Analysis, Statistics, and Economic Research (LASER) job openings data show projected growth in New Mexico for Building Equipment Contractors that is almost triple this sector's national rate from 2020-2030.^{32,33}

This presents an opportunity for New Mexican workers. Average weekly wages for non-residential electrical contractors, non-residential plumbing and HVAC contractors, and building equipment contractors are 27.2%, 14.0%, and 11.6% higher than the state average, respectively.^{34,35} The jobs created by the measures herein offer New Mexicans a more stable and reliable ladder to the middle class with skills that are readily transferrable across pay grades, organizations, and industries. The needed jobs also present significant improvements in workplace conditions for truck and school bus drivers, who have noted in conversations the significant improvement in noise levels, safety, and overall experience from driving fuel cells compared to combustion engine vehicles.

However, there must be a concerted effort to address workforce training gaps for workers living within LIDAC to benefit from the high-quality job opportunities created by the CTI Program and ECO Schools measures, as well as New Mexico's energy transition more broadly. The NMDWS Combined State Plan (CSP) for the federal Workforce Innovation and Opportunity Act (WIOA) finds that lack of experience from job candidates was the main reason that employers identified positions as "difficult to fill," with lack of certification being a uniquely important reason in the construction sector.³⁶ Significant logistical, social, and financial barriers to obtaining this experience and certification require an intentional effort to address and overcome.

NMDWS signed a Letter of Commitment to assist with workforce development under this grant. The NMDWS CSP identifies Sustainable and Green Industries as one of the state's 10 priority career fields meriting a sectoral strategy. NMDWS oversees New Mexico's four LFDBs. LWDBs in the state's four workforce regions (East, North, Central, and Southwest) serve businesses, workers, organized labor groups, other government agencies, and non-profit organizations to coordinate funding and activities at the state's "One Stop" Workforce Connection Centers (WCCs), which directly target the workforce in LIDAC. LWDBs currently administer federal Title II WIOA funding to support direct training and apprenticeship programs at WCCs and complement it with other sources like the

newly created Workforce Development and Apprenticeship Trust Fund (WDATF), the \$60 million in state funds appropriated to the Higher Education Department for workforce development training programs at community colleges for fiscal year 2025, and economic development and job creation/retention funds from the U.S. Department of Housing and Urban Development's Community Development Block Grant program.^{37,38}

These state and federal funds are essential to ensuring apprenticeship options for underemployed residents in LIDAC are available to meet the growing demand in these sectors. However, structural gaps persist in connecting New Mexico workers to training resources. New Mexico has the second-highest portion among all U.S. states of working-age adults not in the labor force,³⁹ in large part due to barriers faced by communities throughout the state, such as limited childcare. Other needs like transportation, and cultural and language barriers vary greatly by LWDB region, from Tribes, Nations, and Pueblos in the Central and North to border communities in the Southwest, to rural communities in the East.

LWDBs have a unique understanding of the obstacles in their regions, the organizations and resources available to surmount them, and the areas where funding from this grant can most effectively complement current efforts in place. NMED proposes to make a fixed amount subaward to NMDWS, who would administer the money in accordance with all applicable statutes and regulations and distribute it to the four LWDBs. LWDBs would then select organizations serving people in LIDAC with the ability to most effectively help residents fully participate in and benefit from the clean energy transition. All four LWDBs are positioned to "braid" funding from this grant with those already available. NMED would oversee the further flow-through of subaward funds, including participant support costs with eligibility requirements as proposed by NMED and approved by EPA.

NMDWS and LWDBs would leverage the \$2 million in workforce funding provided by this grant to pay for custom curriculum development, courses, and instructor salaries to provide relevant training for job seekers in LIDAC across the state. The funding would also help cover on-the-job training expenses.^{40,41} For the workers themselves, the workforce funds (in the form of participant support costs) would cover wrap-around services like direct outreach, case management, rapid hire events, skills assessments, resume building, workplace attire, job search, and interview and life skills training, as approved by EPA. The funds will focus on gaps under Title-I WIOA, such as rent, utilities, and/or general costs for mid-career workers.

NMDWS estimates that the \$2 million in workplace funding provided by this grant will meet the training needs of approximately 200 workers from LIDAC, covering about half of the jobs that would be created from the CTI Program and ECO Schools measures.⁴² NMDWS will assist with tracking outputs and outcomes from workers, including those living within LIDAC, hired under CTI and ECO Schools.

One example of how the workforce funding from this grant application will help fill structural training and certification gaps will be through its support of NMDWS's collaboration with the New Mexico Higher Education Department (NMHED) – Adult Education Division, which is developing a Center of Excellence at San Juan College to reboot its nationally ranked Sustainable and Renewable Energy Program.³⁶ Grant funding from this grant will provide participant support costs for northwestern New Mexicans who need assistance with tuition, childcare, transportation, and other cost of living expenses (via participant support costs, as approved by EPA) and allow program beneficiaries to enroll in the revamped program. and Those completing the program will receive certification from the North American Board of Certified Energy Practitioners (NABCEP) to install photovoltaic (PV) solar panels under the ECO Schools measure.

Organized labor plays a critical role in the quality of jobs needed to implement the CTI Program and ECO Schools measures. NMED would strongly encourage contractors that build vehicle and school building infrastructure to use union contractors and workers in collaboration with labor groups like the New Mexico Building and Construction Trades Council (NMBCTC), which includes the International Brotherhood of Electrical Workers (IBEW) local 611. Organizations like NMBCTC and the New Mexico Joint Apprenticeship Training Committee (JATC) will be pivotal in ensuring that the projects built using grant funds support good, high-paying union jobs in New Mexico.

Further, grant funds will only flow to projects that adhere to Davis-Bacon Prevailing Wage requirements for the General Buildings trades,⁴³ and practices outlined in the U.S. Department of Commerce's Job Quality Toolkit.⁴⁴ NMED would strongly encourage grant-receiving employers to provide family-sustaining benefits and retirement contributions, with health and safety plans developed in conjunction with workers represented under collective bargaining agreements. Conversations with the LWDBs indicate that there will be opportunities to provide re-entry training for state residents recently released from correctional institutions, to provide a new

lease on life to New Mexicans with criminal records. NMED will coordinate with NMDWS and LWDBs on all fronts to ensure New Mexicans across all four regions benefit and to build the foundation of a model for future efforts to propel the state's workforce into high-quality, middle-class jobs.

2.g. PROGRAMMATIC CAPABILITY AND PAST PERFORMANCE

2.g.1 Past Performance and Reporting Requirements

NMED has successfully implemented many other federal grants within its jurisdiction. NMED currently manages 111 federal grants worth over \$165 million. All of the federal financial reports (SF-425s) for NMED's federal grants have been filed on time for the last five years. Federally funded assistance agreements that NMED is performing or has performed within the last three years include:

2.g.1.1 Project Title: Reaching New Mexico's Climate Pollution Reduction Targets

Funding Agency: EPA; **Assistance Listing Number:** 66.046; **Description:** NMED and EMNRD, with outreach to and collaboration from numerous entities that these agencies have involved, including Tribes, Nations, and Pueblos in New Mexico, are building on progress New Mexico has already made to develop priority and comprehensive climate action plans, update greenhouse gas emissions inventories, and quantify the GHG reductions the plans will achieve while focusing on people in LIDAC communities and analyzing benefits to them and the entire state population; **Funding Agency Contact:** Mariama Mitchell, 214-665-6778, Mitchell.Mariama@epa.gov; **Status:** Ongoing. NMED and EMNRD have hired staff, developed and submitted a PCAP with extensive outreach and collaboration as indicated above, filed timely quarterly reports, quantified the GHG reductions the PCAP will achieve, delivered NM PCAP, continued tribal engagement, and focused on and analyzed benefits to people in LIDAC communities and to the entire population of New Mexico. Next steps: develop the comprehensive CCAP with continued extensive stakeholder and tribal engagement, update GHG inventories, continue planning and analysis for workforce development, project and quantify GHG reductions, and analyze community benefits, with an emphasis on LIDAC, of planned climate actions under the CCAP; **Reporting History:** For the CPRG planning grant, NMED has timely submitted two quarterly reports to EPA about progress toward achieving the expected outputs and outcomes, challenges to meeting expected outputs and outcomes during the reporting period, and strategies to address such challenges. This grant has been in place for less than a year, so there is no history of annual reports.

2.g.1.2 Project Title: Hazardous Waste Management State Program Support: RCRA Subtitle C Program for the State of New Mexico

Funding Agency: EPA; **Assistance Listing Number:** 66.801; **Description:** This grant supports the administration of the RCRA program implemented under the Hazardous Waste Act. The State of New Mexico was authorized by EPA to issue RCRA permits in 1985 and to implement the corrective action requirements of the RCRA Hazardous and Solid Waste Amendments in 1996, and the grant supports these activities, which include updating regulations, complying with Environmental Justice requirements, maintaining the RCRA Info database, compliance evaluation, and enforcement; **Funding Agency Contact:** Faybia Clayborne, 214-665-6534, clayborne.faybia@epa.gov; **Status:** Complete. Tasks described above were completed with funds from the grant and a 25% state match supporting payroll tied to the employees performing the work; **Reporting History:** NMED's Hazardous Waste Bureau met its reporting requirements and included information in the reports about progress toward achieving the expected outputs and outcomes, challenges to meeting expected outputs and outcomes during the reporting period, and strategies to address such challenges.

2.g.1.3 Project Title: EPA Brownfields Assessment Coalition Grant (10/01/2019 - 03/30/2023)

Funding Agency: EPA; **Assistance agreement number – Grant Number (FAIN):** 01F67601; **Assistance Listing Number:** 66.818; **Description:** NMED partnered with the Southwest New Mexico Council of Governments (SWCOG) and Northwest New Mexico Council of Governments (NWCOG) to form a coalition to engage community members, identify, assess, and plan for the cleanup and redevelopment of brownfield sites within Target Areas; **Funding Agency Contact:** Marsha Lay, 214-665-7562, lay.marsha@epa.gov; **Status:** Complete; **Reporting History:** NMED's Ground Water Quality Bureau's Brownfields Program successfully managed and completed this \$500,000 grant. Seven Phase I Environmental Site Assessments and ten Phase II Environmental Site Assessments have been completed with grant funds totaling \$499,945.00. The NMED Brownfields Program staff submitted all quarterly reports and the final report in accordance with all deadlines.

2.g.1.4 Project title: EPA Brownfields Cleanup Revolving Loan Fund (9/14/2009 – 9/30/2024) \$2,755,326

Funding Agency: EPA; **Assistance agreement number – Grant Number/Cooperative Agreement Number:** BL 96691801; **Assistance Listing Number:** 66.818; **Brief description of the agreement:** NMED Brownfields Cleanup Revolving Loan Fund offers low-interest loans with favorable terms that can be used for remediating contamination at eligible brownfield sites; **Funding Agency Contact:** Emily Jimenez, 214-665-2176, jimenez.emily@epa.gov; **Reporting History:** The NMED Brownfields Program staff has submitted all quarterly reports by all deadlines. The NMED Brownfields Program successfully managed and executed the revolving loan fund. Loans have been executed for the following private redevelopment projects: Homewood Suites, Albuquerque (\$951,385), Las Cruces Community Farms, Berino (\$300,000), and Winrock Town Center, Albuquerque (\$378,700). Numerous subgrants for cleanup have also been awarded to governmental entities and non-profits.

2.g.1.5 Project title: Clean Water State Revolving Loan Fund Capitalization Grants

Funding Agency: EPA; **Assistance agreement number:** CS-350002-16 -0 through CW-350002-21-0; **Assistance Listing Number:** EPA 66.458; **Brief description of the agreement:** The purpose of these agreements was to provide funds to the SRF to support providing low-interest financing to the planning, design, and construction of eligible water quality improvements and protection projects; **Funding Agency Contact:** Thomas F. Cooney III, 214-665-6580, cooney.thomas@epa.gov; **Status:** The project is complete; **Reporting History:** NMED CPB submitted acceptable interim and final reports, adequately and timely reported on its progress toward achieving the expected outputs and outcomes under this grant, and has expeditiously drawn down the grants.

2.g.2 Staff Expertise

NMED is an agency of the State of New Mexico whose staff has extensive education, training, expertise, and decades of experience in environmental protection and restoration. NMED's Climate Change Bureau (CCB) currently has six committed staff members: a bureau chief, two program managers, three environmental scientists, and a climate economist. NMED is creating five additional positions, in addition to the staff proposed under this grant (see attachment to Other Attachments Form titled "NMED Staff Resumes" for resumes with qualifications of current staff and Budget Table and Budget Narrative for description of proposed staff). Individual CCB staff have extensive experience in air quality, including GHG, emissions inventory, program and staff development, economic analysis, staff supervision, grant and financial management, data collection and analysis, procurement, project management, and oversight of contractors.

In addition, CCB has a bureau financial manager and an attorney administratively attached to other bureaus who exclusively support this bureau. Governor Michelle Lujan Grisham's office and NMED's leadership provide expert guidance, support, and review of grant applications and major deliverables. NMED's Human Resources, Financial Services, and other departments of state government also support CCB's work by assisting with procurement, grant management, and other services. NMED financial managers and staff collectively have decades of extensive successful grant and financial management experience and skill. Bill Lane of NMED's Financial Services Bureau has over 10 years of experience managing federal grants for the department and has maintained a perfect record of timely federal financial reporting for the past five years. This knowledge, expertise, and extensive experience will be employed to successfully achieve the GHG reduction measures and other goals of the Enacting Solutions to Reduce Transportation-Related Climate Pollution project.

3 BUDGET NARRATIVE

3.a. DESCRIPTIVE BUDGET NARRATIVE

This budget narrative uses the following budget categories to break out costs associated with the implementation of the proposed measures:

- **Personnel:** As is the hiring practice, NMED used the midpoint of salaries for new positions, using New Mexico State Personnel salary figures, to calculate the direct costs for salaries and wages. See organization chart below.
- **Fringe Benefits:** Allowances and services provided by the employer to personnel in addition to regular salaries and wages. These include the cost of leave, employee insurance, pensions and unemployment, and similar benefits.
- **Travel:** Costs for transportation services, lodging, per diem, and similar personal expenses allowed under applicable travel policies for trips necessary to implement the grant deliverables
- **Equipment:** Costs for tangible, non-expendable, personal property having a useful life of more than one year and an acquisition cost of \$5,000 or more per unit used by personnel implementing the proposal. Equipment purchased by awardees is classified in the “Other” budget category as participant support costs.
- **Supplies:** Costs for tangible personal property other than equipment with a per-item acquisition cost of less than \$5,000 that are necessary to implement the proposal.
- **Contractual:** Costs associated with contracts to acquire property (including intellectual property) and services needed to carry out the proposal.
- **Other:** Direct costs that do not fit in any of the other budget categories, including participant support costs and subawards.
- **Indirect:** Costs incurred for a common or joint purpose that benefits more than the proposed project that is not readily divisible among cost objectives without efforts disproportionate to the results achieved. Examples include space costs, utilities, accounting services, human resources, etc.

An explanation of costs associated with each measure and a consolidated budget are presented below. A breakdown of costs for each budget category for each measure is provided in the CPRG Implementation Grants Budget Table included with this proposal. Where appropriate, a 3% annual increase in costs is included to account for inflation and pay raises to keep up with inflation.

3.a.1 Clean Truck Incentive Program

See the Clean Truck Incentives Budget tab in the CPRG Implementation Grants Budget Table included with this proposal for itemized costs associated with each budget category.

3.a.1.1 NMED Personnel and Fringe

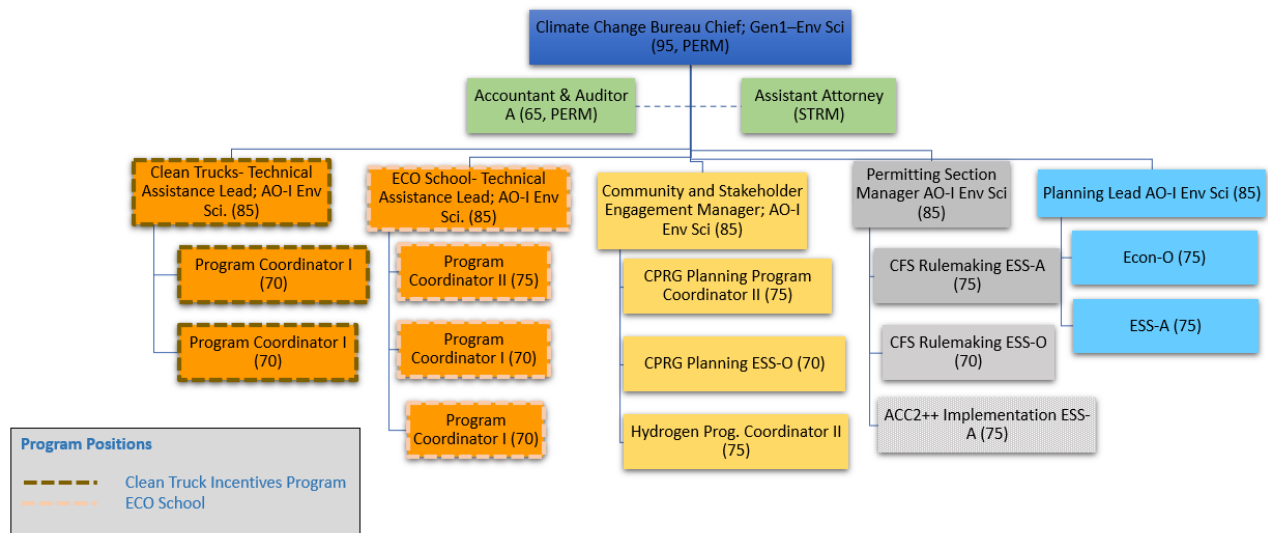
Costs for existing staff are based on current salaries with a 3% yearly increase to allow for raises to keep pace with inflation. Costs for new staff are based on the midpoint of salaries from the New Mexico State Personnel website with a 3% yearly increase to allow for raises for inflation.

The existing Climate Change Bureau Chief (Gen I – Env Sci) - will be spending 5% of her time on the CTI measure, which is calculated to total \$32,506 for the five-year grant period, will create positions, hire staff, and manage the workload, assisted by the existing Accountant and Auditor (one position) and the two Program Managers. In addition, the existing Accountant and Auditor will spend 10% of her time, which is calculated to total \$35,776 over five years, on the CTI measure accounting for and monitoring expenditures. The two existing Program Managers (A/O I – Env Sci) will spend a total of 10% of their time in year 1 of the grant on the CTI measure, for a total of \$19,290, assisting with creating positions, hiring staff, and performing other initial work needed.

The new CTI Program Manager (A/O I – Env Science), 1 FTE 100% dedicated to the CTI measure, whose salary is calculated to be \$469,341 over five years, will manage Clean Truck Incentives measure grant funds, work with NMDWS on workforce development aspects, procure contractors, select a fleet advisor through competitive procurement per 2 CFR § 200, and begin preparing a program manual, application, training materials, and terms and conditions for participating dealerships and station installers. The CTI Program Manager will supervise the

two new CTI Program Coordinator I's, plan and manage programs, budgets, contracts, and subawards, assisted by the existing Accountant and Auditor and supervised by the Climate Change Bureau Chief. The new staff of the CTI measure will be part of a technical assistance center that will support interested LIDAC businesses throughout the entire process, including assistance with the application, site design, utility applications, ZET choices, federal ZET tax incentives, and infrastructure installation. In Figure 1 NMED presents how the positions proposed under this grant application fit into the Climate Change Bureaus organizational chart.

Figure 1. Climate Change Bureau Organizational Chart with NMED Proposed Positions Under CPRG Phase II Application: Enacting Solutions to Reduce Transportation-Related Climate Pollution



The two Program Coordinator I positions for the Clean Truck Incentives measure (CTI Program Coordinators) 2 FTEs each 100% dedicated to the CTI measure, whose salaries total \$684,744 over five years, in addition to assisting with the above responsibilities, will assist with publicizing and will carry out the program both from their offices and throughout the state. CTI Program Coordinators will use various means (mass emails, websites, calls, meetings), in coordination with the outreach and stakeholder and social media outreach contractors, to publicize and educate stakeholders about the Clean Truck Incentives. The CTI Program Manager and CTI Program Coordinator I will review applications, determine eligibility, prioritize applicants owned by or operating in LIDAC, select awardees, enter into agreements with project awardees, and disburse vouchers as established in the agreements with project awardees. CTI Program Coordinator I's, in coordination with consultants as appropriate, will revise the CTI Program manual, promotional materials, and application as needed in response to participant and community feedback.

Fringe benefits are calculated by multiplying the position's salary by 38.8%. This percentage is the average that the agency spends for each employee's medical, dental, and vision insurance, retirement, FIA, worker's compensation, unemployment insurance, employment liability, and retiree healthcare. Fringe benefits also include all forms of leave (sick, family-related, annual, holidays, etc.).

3.a.1.2 NMED Travel

NMED expects the CTI Program Manager and Program Coordinators to use the new electric vehicle consistent with department policies to implement the incentive programs established through this grant. NMED staff will travel to sites where vouchers may be or have been used, and to other locations to promote and implement the CTI Program statewide, taking approximately 12 of these trips per year each. In addition, NMED anticipates that the three CTI Program staff will take longer trips for training and/or presentations requiring airfare and hotel stays three times per year each. Mileage for in-state travel, \$51,860 over the five years, represents 37 trips total per year averaging 400 miles/trip at the current New Mexico mileage reimbursement rate of 66 cents per mile, adjusted yearly for inflation. Per Diem fees are based on 37 in-state trips and 11 out-of-state travel days total per year, adding up to \$27,722 over the five years. Because New Mexico is a large, rural state, the proposed travel distances are a reasonable estimate based on distances both to major cities and to all areas of the state, round

trip, and amount of travel needed for setting up and running the CTI measure and attending training and conferences. Airfare over the five years, \$27,873 for all staff, is based on conservative current costs for one medium- and two long-range trips, considering the frequency and types of training classes and conferences offered at those distances that staff would be likely to need to attend to be well-trained for this work. Luggage fees totaling \$1,195 for the grant period are based on conservative luggage fees. Hotel fees are based on realistic in-state and out-of-state rates and total \$46,858 for the five-year period, based on the above assumptions for the number of trips.

3.a.1.3 NMED Equipment

NMED plans to purchase an American-made ZEV appropriate for the travel required for the CTI program and ECO Schools and share the cost evenly between the two programs (see budget spreadsheet attached in grants.gov). Staff of both programs can use this vehicle, other Climate Change Bureau vehicles, and other NMED bureaus' vehicles for in-state travel. No additional equipment needs are anticipated for CTI staff. Climate Change Bureau staff obtained an estimate of \$58,680 for a 2023 Ford F-150 Lightning PRO CrewCab 4WD vehicle from a qualified vendor for the State of New Mexico. \$29,340 is the share of this cost for the CTI measure.

3.a.1.4 NMED Supplies

NMED plans to purchase and install a level 2 charger for the American-made ZEV referred to in Equipment to be split evenly between the two measures (see budget spreadsheet attached in grants.gov). A total cost of \$4,900, including installation, was obtained for a charger with appropriate output from a 2019 RMI study, "Reducing EV Charging Infrastructure Costs." \$2,450 is the share of this cost for the CTI measure. The three new CTI Program staff will need laptop computers and peripherals for office work and to enable them to work while traveling as well as take notes while meeting in locations other than their offices. Computers and peripherals wear out and require periodic replacement. CTI Program staff will need a projector and other meeting supplies, paper for outreach meetings, and materials and webcams for virtual meetings. CTI Program staff will need mail and copy services, office supplies, and occasionally fax service, for outreach materials, mailings, office work, and transmittals. Prices for laptops, docking stations, monitors, keyboards, etc., were taken from recent NMED purchase records and adjusted for inflation. Total cost over five years with replacement and inflation is projected to be \$15,276. The total cost of iPhones with good cameras needed for documenting the installation of chargers and purchase of vehicles for three staff over five years comes out to \$4,299. The total cost of meeting supplies, paper supplies, and communication supplies such as tables, banners, outreach materials, and mail is \$10,226 for the 5-year period.

3.a.1.5 NMED Contractual

The CTI Program will need contractual support for community, Tribal, and stakeholder outreach and engagement with a focus on LIDAC, including social and other media outreach as appropriate. For the 5-year grant period, \$115,000 is budgeted for this support, based on the costs of similar outreach, with the majority of the funds spent in the first two years as is appropriate. The implementation of the CTI Program requires technical analysis to measure progress toward achieving established targets, including calculating and reporting reductions in GHG, NO_x, SO₂, PM_{2.5}, and PM₁₀. Community benefits, planning, and workforce analyses also require technical expertise. Hiring consultants is the most cost-effective way to obtain these specialized skills. The budget includes \$200,000 over five years for these analyses and reporting for the CTI measure, based on the costs of similar analytical consulting fees.

Contractual costs also include the cost of a fleet advisor to provide fleet assessment services to selected awardees to assess organizations' fleets and identify the most appropriate and cost-effective vehicles to transition to ZET and in what order. Costs are from the actual average expense per fleet advised from the state of Massachusetts, which is \$21,000, and totals \$1,680,000 for 80 fleet assessments over four years, allowing time for staff to be hired and federal and state procurement processes to be followed.

3.a.1.6 NMED Other

Funds proposed to be passed through as participant support costs for this measure include the cost of:

- 750 Point-of-sale ZET (zero-emission truck) vouchers for class 2b-8 ZETs that cover the price difference between ZETs and conventional trucks. This is broken down into:
 - 150 Class 2B-3 ZETs: while Class 2B-3 vehicles are the most common medium- and heavy-duty vehicles on the road, many models are already approaching cost parity when the 45W tax credit

is accounted for, so the number of estimated vouchers has been reduced relative to the number of this class of vehicle on the road.

- 500 Class 4-6 ZETs,
- 100 Class 7-8 ZETs,
- While hydrogen vehicles and infrastructure will be eligible under this program, NMED assumes it is unlikely that any hydrogen vehicles will be purchased through this program.
- Funds proposed to be passed through as participant support costs for the CTI measure also include the cost of approximately 440 point-of-sale infrastructure vouchers supporting the purchase and installation of essential Level 2 and 3 charging stations to power ZETs, including 375 Level 2 chargers and 63 Level 3 (150 kW) chargers.

The budget for CTI includes \$38,818,712 over four years for all of these vouchers. NMED will disburse an estimated \$9,278,722 via vouchers for the EV trucks and chargers in year 2, allowing a year between grant award and initial voucher disbursement for the hiring of program staff, developing guidelines, writing manuals, outreach and publicity, and other startup tasks.

The differences in costs between ZETs and conventional trucks are based on incremental cost analysis of current costs by the U.S. DOE across classes of on-road vehicles. The value of the vehicle vouchers is this difference in cost minus the maximum applicable federal \$ 45W tax credit.

The costs of chargers are based on the average cost of electric vehicle charging equipment and installation from a study conducted by ICF, a global advisory and technology services provider. The value of the charger vouchers is the cost of the equipment and installation, minus the maximum applicable federal \$ 30C tax credit and the maximum of the state of New Mexico tax credit for Clean Car Charging Units. It is estimated that 75% of vouchers will receive the state tax credit, as tax-exempt entities are not eligible. As deemed appropriate, the CTI measure guidelines will require awardees to apply for all state and federal tax credits and other incentives for which they are eligible.

NMED proposes to make a fixed amount subaward of \$1,000,000 at \$200,000 a year to NMDWS as part of the CTI measure under Other Expenses to pay for custom curriculum development, courses, and instructor salaries to provide relevant training for job seekers residing in LIDAC across the state. The funding would also help cover on-the-job training expenses^{45,46} and wrap-around services like direct outreach, case management, rapid hire events, skills assessments, resume building, job search, interview, and life skills training, as approved by EPA. The funds would also cover gaps under Title-I WIOA, such as rent, utilities, and/or general costs for mid-career workers, as approved by EPA.

NMDWS estimates that the \$2 million in workplace funding provided by this grant (\$1,000,000 will be a subaward under the ECO Schools measure) will meet the training needs of approximately 200 workers from LIDAC, covering about half of the jobs that would be created from the CTI Program and ECO Schools measures.⁴⁷ NMDWS will assist with tracking outputs and outcomes from workers, including those living within LIDAC, hired under CTI and ECO Schools. Additional details are provided in Subsection 2.f JOB QUALITY.

Other costs in the “Other” category are:

- Costs per FTE (full-time equivalent employee) not covered by the indirect cost rate or fringe: costs for payroll and financial software subscription, phone service, IT services including email, PowerPlatform, internet, software. NMED financial staff provided these costs, and they are calculated for six months for year 1 of the grant due to the time needed to create and hire for positions. The total over five years for these costs is \$90,922 for the three FTEs NMED plans to hire to assist with carrying out the CTI measure.
- Costs to enable the staff, awardees, consultants, and other necessary parties to participate in video meetings, including one conferencing system with a 360-degree camera, speakers, mics, and one projector, which could be used for presentations for both remote and in-person meetings. These costs would total \$1,700 over the five-year period. NMED obtained estimates for these costs from an internet search.
- The cost for a full video conferencing license for 3 hosts totals \$3,463 over five years. NMED obtained estimates for these costs from an internet search.
- The cost of a public survey subscription or license for 3 users totals \$12,985 over five years. This tool will enable staff to conduct public outreach surveys and tailor programs to awardees’ needs. NMED obtained estimates for these costs from an internet search.

- The cost of a project management software license or subscription for three users totals \$2,866 over five years. Project management software will assist staff in keeping track of the many tasks that will be required to put the CTI measure and the program to run it in place. NMED obtained estimates for these costs from an internet search.

3.a.1.7 NMED Indirect Costs

NMED's indirect cost rate, negotiated with EPA, on personnel and fringe benefits, but not other costs, is 35.2%.

3.a.2 ECO Schools

See the ECO Schools Budget tab in the CPRG Implementation Grants Budget Table included with this proposal for itemized costs associated with each budget category.

3.a.2.1 NMED Personnel and Fringe

Costs for existing staff are based on current salaries with a 3% yearly increase to allow for raises to keep pace with inflation. Costs for new staff are based on the midpoint of salaries from the New Mexico State Personnel website with a 3% yearly increase to allow for raises for inflation.

The existing Climate Change Bureau Chief (Gen I – Env Sci), who will be spending 5% of her time on the ECO Schools measure, which is calculated to total \$32,506 for the five-year grant period, will create positions, hire staff, and manage the workload, assisted by the existing Accountant and Auditor (one position) and the two Program Managers. In addition, the existing Accountant and Auditor will spend 10% of her time, which is calculated to total \$35,776 over five years, on the ECO Schools measure accounting for and monitoring expenditures. The two existing Program Managers (A/O – Env Sci) will spend a total of 10% of their time in year 1 of the grant on the ECO Schools measure, for a total of \$19,290, assisting with creating positions, hiring staff, and performing other initial work needed.

When hired, the ECO Schools Program Manager (A/O I – Env Science), 1 FTE 100% dedicated to the ECO Schools measure, whose salary is calculated to be \$469,341 over five years, will manage the ECO Schools measure grant funds as well as subawards to LWDBs. The new Program Coordinator II, 1 FTE 100% dedicated to the ECO Schools measure, whose salary is calculated to total \$384,717 over five years, may assist the Manager with these tasks as appropriate. The ECO Schools Program Manager will supervise the ECO Schools Program Coordinator II and the two new ECO Schools Program Coordinator Is and plan and manage programs, budgets, contracts, and subawards, assisted by the existing Accountant and Auditor and supervised by the Climate Change Bureau Chief. The ECO Schools Program Manager and Program Coordinator II will procure contractors, select a fleet advisor through competitive procurement per 2 CFR § 200, and begin preparing a program manual, application, training materials, and terms and conditions for participating dealerships and station installers. NMED presents the proposed organizational chart for the positions funding under this grant above in Figure 1.

The two new ECO Schools Program Coordinator I's, who are both 100% dedicated to the ECO Schools measure, in addition to assisting with the above responsibilities, will assist with publicizing and will carry out the program both from their offices and throughout the state. NMED has budgeted \$684,744 over five years for the two new Program Coordinator I's. ECO Schools Program Coordinators will use various means (mass emails, websites, calls, meetings), in coordination with the outreach and stakeholder and social media outreach contractors, to publicize and educate stakeholders about the ECO Schools program. The ECO Schools Program Manager and ECO Schools Program Coordinator II will review applications, determine eligibility, prioritize applicants owned by or operating in LIDAC, select awards, enter into agreements with project awardees, and disburse vouchers as established in the agreements with project awardees. ECO Schools Program Coordinators I and II, in coordination with consultants as appropriate, will revise the ECO Schools program manual, promotional materials, and application as needed in response to participant and community feedback.

The new ECO Schools staff, with the new CTI staff, will make up a technical assistance center that will, with consultant assistance, conduct outreach to all Title I schools statewide and the tribal schools within New Mexico. The ECO Schools staff will support the school from application to ESB delivery, successful charging station installation, and implementation of performance-based energy-saving capital improvements. ECO Schools staff will also connect awardees with EMNRD's building energy-saving programs, existing federal, state, and utility funding, and tax credit opportunities.

Fringe benefits are calculated by multiplying the position's salary by 38.8%. This percentage is the average that the agency spends for each employee's medical, dental, and vision insurance, retirement, FIA, worker's compensation, unemployment insurance, employment liability, and retiree healthcare. Fringe benefits also include all forms of leave (sick, family-related, annual, holidays, etc.).

3.a.2.2 Travel

NMED expects ECO Schools Program Managers and Program Coordinators to use NMED vehicles to travel to community meetings, sites where vouchers may be used, and other locations to promote and implement ECO Schools statewide, taking approximately 12 of these trips per year each. In addition, NMED anticipates the four ECO Schools staff to take longer trips for training and/or presentations requiring airfare and hotel stays approximately three times per year each. Mileage for in-state travel, \$70,081 over the five years, represents 50 trips total per year averaging 400 miles/trip at the current New Mexico mileage reimbursement rate of 66 cents per mile, adjusted yearly for inflation. Per Diem fees are based on 50 in-state trips and 11 out-of-state travel days total per year, adding up to \$37,275 over the five years. New Mexico is a large, rural state, and the estimates are reasonable considering the great distances between major cities and other areas of the state and the amount of travel needed for setting up and running the CTI measure and attending training and conferences. Airfare over the five years, \$37,164 for the four new staff, is based on conservative current costs for one medium- and two long-range trips, considering the frequency and types of training classes and conferences offered at those distances that staff would be likely to need to attend to be well-trained for this work. Luggage fees totaling \$1,593 for the grant period are based on conservative luggage fees. Hotel fees are based on realistic in-state and out-of-state rates and total \$64,771 for the five-year period, based on the above assumptions for the number of trips.

3.a.2.3 Equipment

NMED plans to purchase an American-made ZEV appropriate for the travel required for the CTI and ECO Schools programs and split the cost evenly between the two programs (see budget spreadsheet attached in grants.gov). Staff of both programs can use this vehicle, other Climate Change Bureau vehicles, and other NMED bureaus' vehicles for in-state travel. No additional equipment needs are anticipated for ECO Schools staff. Climate Change Bureau staff obtained an estimate of \$58,680 for a 2023 Ford F-150 Lightning PRO Crew-cab 4WD vehicle from a qualified vendor for the State of New Mexico. \$29,340 is the share of this cost for the ECO Schools measure.

3.a.2.4 NMED Supplies

NMED plans to purchase a level 2 charger for the American-made ZEV referred to in Equipment to be split evenly between the two measures. A total cost of \$4,900, including installation, was obtained for a charger with appropriate output from a 2019 RMI study, "Reducing EV Charging Infrastructure Costs." \$2,450 is the share of this cost for the ECO Schools measure. The four new ECO Schools program staff will need laptop computers and peripherals for office work and to enable them to work while traveling as well as take notes while meeting in locations other than their offices. Computers and peripherals wear out and require periodic replacement. ECO Schools staff will need a projector and other meeting supplies and paper or eco-friendly options for outreach meetings and materials and webcams for virtual meetings. ECO Schools staff will need mail and copy services, clipboards, and other office supplies for outreach materials, mailings, and office work. Prices for laptops, docking stations, monitors, keyboards, etc., were taken from recent NMED purchase records and adjusted for inflation. The total cost over five years with replacement and inflation for the four ECO Schools staff is projected to be \$18,288. The total cost of iPhones with good cameras needed for documenting the installation of chargers and purchase of vehicles for four staff over five years totals \$5,129. The total cost of meeting supplies, paper supplies, and communication supplies such as tables, banners, outreach materials, and mail is \$12,471 for the five-year period.

3.a.2.5 NMED Contractual

The ECO Schools program will need contractual support for community, Tribal, and stakeholder outreach and engagement with a focus on LIDAC, including social and other media outreach as appropriate. The consultant, chosen in accordance with state and federal procurement regulations, will assist with conducting outreach to all Title I schools statewide and the tribal schools within New Mexico. For the five-year grant period, \$115,000 is budgeted for this support, based on the costs of similar outreach, with the majority of the funds spent in the first two years.

ECO Schools implementation requires technical analysis to measure progress toward achieving established targets, including calculating and reporting reductions in GHG, NOX, SO₂, PM_{2.5}, and PM₁₀. Assessing community and workforce benefits also requires technical analysis. Hiring consultants is the most cost-effective way to obtain these specialized skills. The budget includes \$200,000 over five years for these analyses and reporting for the ECO Schools measure, based on the costs of similar analytical consulting fees.

Contractual costs also include the cost of a fleet advisor to provide fleet assessment services to selected awardees to assess schools' bus fleets and identify the most appropriate and cost-effective vehicles to transition to ZET and in what order. Costs are from actual average expense per fleet advised from the state of Massachusetts and total \$700,000 for approximately 33 fleet assessments over four years, allowing time for staff and contractors to be hired and federal and state procurement processes to be followed.

Finally, NMED plans to procure a contract or contracts for approximately 10 third-party reviews of Guaranteed Energy Savings Performance Contracts (ESPC) per year. These reviews are required for awardees under the ESPC program, an EMNRD program that connects schools with energy audits and financing of capital improvement for efficiency upgrades and on-site renewable energy generation and storage.

3.a.2.6 NMED Other

Funds proposed to be passed through as participant support costs for this measure include:

- Point-of-sale vouchers covering 100% of the manufacturer's suggested retail price (MSRP) for about 100 ESBs, reducing tailpipe emissions from vehicles operating near highly vulnerable populations. New Mexico's Public Education Department provided actual electric school bus costs of \$420,000 per bus.
- Point-of-sale vouchers supporting the purchase and installation of about 210 charging stations, which would power about 420 ESBs, regardless of a school's ESB procurement method or source of award for additional ESBs. New Mexico's Public Education Department provided costs for ESB chargers based on actual school district costs from which NMED chose a best estimate of \$46,000 per charger for a two-bus charger.
- As deemed appropriate, the ECO School measure guidelines will require awardees to apply for all state and federal tax credits and other incentives for which they are eligible.

NMED also proposes to make a fixed amount subaward of \$1,000,000 at \$200,000 a year to NMDWS (New Mexico Department of Workforce Solutions) as part of the ECO Schools under Other Expenses to pay for custom curriculum development, courses, and instructor salaries to provide relevant training for job seekers residing in LIDAC across the state. The funding would also help cover on-the-job training expenses^{48,49} and wrap-around services like direct outreach, case management, rapid hire events, skills assessments, resume building, job search, interview, and life skills training, as approved by EPA. The funds would also cover gaps under Title-I WIOA, such as rent, utilities, and/or general costs for mid-career workers, as approved by EPA.

NMDWS estimates that the \$2 million in workplace funding provided by this grant will meet the training needs of approximately 200 workers from LIDAC, covering about half of the jobs that would be created from the CTI Program and ECO Schools measures.⁵⁰ NMDWS will assist with tracking outputs and outcomes from workers, including those living within LIDAC, hired under CTI and ECO Schools. See also Subsection 2.f JOB QUALITY.

Other costs in the "Other" category are:

- Costs per FTE (full-time equivalent employee) not covered by the indirect cost rate or fringe: costs for payroll and financial software subscription, phone service, IT services including email, PowerPlatform, internet, and software. NMED financial staff provided these costs, and they are calculated for six months for year 1 of the grant due to the time needed to create and hire for positions. The total over five years for these costs is \$129,229 for the four FTEs NMED plans to hire to assist with carrying out the ECO Schools measure.
- Costs to enable the staff, awardees, consultants, and other necessary parties to participate in video meetings, including one conferencing system with a 360-degree camera, speakers, mics, and one projector, which could be used for presentations for both remote and in-person meetings. These costs would total \$1,700 over the five-year period. NMED obtained estimates for these costs from an internet search.
- The cost for a full video conferencing license for 4 hosts totals \$4,617 over five years. NMED obtained estimates for these costs from an internet search.

- The cost of a public survey subscription or license for 3 users totals \$12,985 over five years. This tool will enable staff to conduct surveys, assist with public outreach, and enable staff to tailor programs to awardees' needs. NMED obtained estimates for these costs from an internet search.
- The cost of a project management software license or subscription for four users totals \$3,822 over five years. Project management software will assist staff in keeping track of the many tasks that will be required to put the ECO Schools measure and the program to run it in place. NMED obtained estimates for these costs from an internet search.

3.a.2.7 NMED Indirect Costs

NMED's indirect cost rate, negotiated with EPA, on personnel salary and fringe benefits, but not other costs, is 35.2%.

3.a.3 Consolidated Budget by Year

Table 16 presents NMED's proposed consolidated budget by year.

Table 16. Consolidated Budget by Year- CTI Program and ECO Schools

COST-TYPE	CATEGORY	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	TOTAL
Direct Costs	TOTAL PERSONNEL	\$344,279	\$603,245	\$621,342	\$639,982	\$659,182	\$2,868,030
	TOTAL FRINGE BENEFITS	\$133,580	\$234,059	\$241,081	\$248,313	\$255,763	\$1,112,796
	TOTAL TRAVEL	\$72,215	\$74,381	\$76,613	\$78,911	\$81,278	\$383,398
	TOTAL EQUIPMENT	\$58,680	\$0	\$0	\$0	\$0	\$58,680
	TOTAL SUPPLIES	\$38,624	\$8,530	\$10,443	\$9,781	\$3,152	\$70,530
	TOTAL CONTRACTUAL	\$396,000	\$891,000	\$931,000	\$877,000	\$915,000	\$4,010,000
	TOTAL OTHER	\$429,711	\$20,923,380	\$21,539,081	\$22,173,254	\$22,826,451	\$87,891,877
	TOTAL DIRECT	\$1,473,089	\$22,734,595	\$23,419,560	\$24,027,241	\$24,740,825	\$96,395,310
	TOTAL INDIRECT	\$168,206	\$294,731	\$303,573	\$312,680	\$322,060	\$1,401,251
TOTAL FUNDING		\$1,641,295	\$23,029,326	\$23,723,133	\$24,339,921	\$25,062,886	\$97,796,560

3.a.4 Consolidated Budget by Project

Table 17 presents NMED's proposed consolidated budget by project.

Table 17. Consolidated Budget by Year- CTI Program and ECO Schools

Project Number	Project Name	Total Cost	% of Total
1	Clean Truck Incentives	\$44,480,096	45%
2	ECO Schools	\$53,316,464	55%
Total		\$97,796,560	100%

3.a.5 Expenditure of Awarded Funds

NMED will expend and account for awarded funds in accordance with all applicable federal and state laws, regulations, and procedures. NMED uses Oracle financial software to track and report on expenditures and revenue. This financial management system complies with the federal requirements of 2 CFR § 200.302(b) by:

- Identifying all federal awards received and expended and the federal programs under which they were received. Federal program and federal award identification include, as applicable, the Assistance Listings title and number, Federal award identification number and year, name of the Federal agency, and name of the pass-through entity, if any.
- Providing accurate, current, and complete disclosure of the financial results of each Federal award or program in accordance with the reporting requirements outlined in 200.328 and 200.329.
- Providing records that identify adequately the source and application of funds for federally funded activities. These records contain information about federal awards, authorizations, financial obligations, unobligated balances, assets, expenditures, income, and interest and are supported by source documentation.
- Maintaining effective control over, and accountability for, all funds, property, and other assets.

NMED safeguards all assets using building, suite, and office security and locking procedures and assures that they are used solely for authorized purposes by requiring employees to sign agreements to that effect and enforcing consequences for their misuse.

NMED will require all awardees of Participant Support Costs to provide invoices with supporting documentation.

The semi-annual reports and final report will include a breakdown of expenditures associated with the implementation of this proposal and will be provided to the EPA according to the timelines outlined in Tables 15 and 17.

3.b. REASONABLENESS OF COST

The project team has researched and outlines the costs for the measures included in this application and included specifics in the budget narrative and spreadsheet (attached in grants.gov), using as a guidance the principles contained in 2 CFR § 200.404, Reasonable Costs:

In nature and amount, the costs do not exceed “that which would be incurred by a prudent person under the circumstances prevailing at the time the decision was made to incur the cost” with consideration given to: (a) Whether the cost is of a type generally recognized as ordinary and necessary for NMED operations and the proper and efficient performance of the proposed award, (b) The restraints or requirements imposed by such factors as: sound business practices; arm's-length bargaining; Federal, state, local, tribal, and other laws and regulations; and terms and conditions of the proposed award, (c) Market prices for comparable goods or services for the project geographic area, and (d) Prudence proposed to be exercised in the implementation of the grant considering responsibilities to NMED, its employees, the public at large, and the Federal government.

To the extent possible, NMED will not significantly deviate from its established practices and policies regarding the incurrence of costs.

4 TECHNICAL APPENDIX

This technical appendix explains the methodology and assumptions used for developing the estimated greenhouse gas (GHG) emissions and co-pollutant emissions reduced for each measure included in the proposal. The “GHG Emission Reduction Calculation Spreadsheet” included with this application provides the specific GHG emission reduction calculations for each measure.

4.a. CLEAN TRUCK INCENTIVE PROGRAM

4.a.1 Emission Reductions Estimate Method, and Models Used

Emissions reductions for ICEVs and EVs were modeled using the AFLEET Tool³¹ in this measure, as were corresponding air quality impacts. For the electric vehicle chargers’ component of this measure, the percentage of capital expenditure was used to estimate attributable emissions reductions. Additional details and full calculations can be found in the emission reduction calculation spreadsheet (attached in grants.gov).

4.a.2 Measure Implementation Assumptions

The following key assumptions about measure implementation were used to quantify emissions reductions for this measure:

- Vouchers are distributed on a rolling basis such that:
 - 25% of vehicles and infrastructure are in service in Q3 2026,
 - 50% of vehicles and infrastructure are in service in Q3 2027,
 - 75% of vehicles and infrastructure are in service in Q3 2028,
 - And 100% of vehicles and infrastructure are in service in Q3 2029.
- Vehicles and infrastructure have a 15-year lifetime.
- Operation and maintenance costs are paid by the recipient of the voucher and are not accounted for in calculations.
- The incremental costs of vehicles are based on incremental cost analysis of current costs by the U.S. DOE across classes of on-road vehicles.
- The value of the vehicle vouchers is the incremental cost of the vehicle, less the maximum applicable federal § 45W tax credit.
- The costs of chargers are based on the average cost of electric vehicle charging equipment and installation from a study conducted by ICF.
- The value of the charger vouchers is the cost of the equipment and installation, less:
 - The maximum applicable federal § 30C tax credit, and
 - the maximum state tax credit for Clean Car Charging Units,
 - It is estimated that 75% of vouchers will receive the state tax credit, as tax-exempt entities are not eligible.
- The numbers of vouchers and infrastructure under this program are the following:
 - 150 Class 2B-3 ZETs: while Class 2B-3 vehicles are the most common medium- and heavy-duty vehicles on the road many models are already approaching cost parity when the 45W tax credit is accounted for, so the number of estimated vouchers has been reduced relative to the number of this class of vehicle on the road.
 - 500 Class 4-6 ZETs,
 - 100 Class 7-8 ZETs,
 - 375 Level 2 Chargers, and
 - 63 Level 3 (150 kW) Chargers.

While hydrogen vehicles and infrastructure will be eligible under this program, because of the timeframe of this grant, NMED assumes that no hydrogen vehicles or associated fueling infrastructure will be subsidized through this program.

4.a.3 Emission Reduction Estimate Assumptions

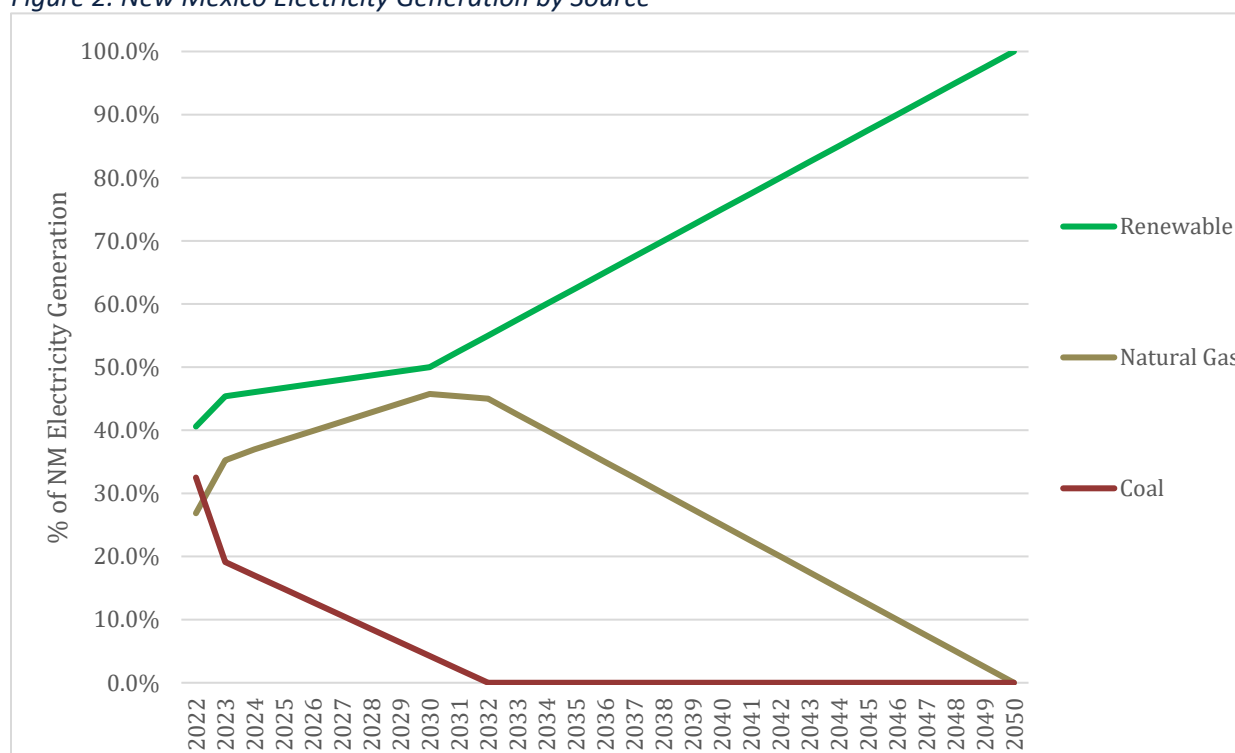
NMED used the following assumptions in Table 18 about the vehicles funded by this measure to quantify emission reductions.

Table 18. Vehicle Assumptions for Emission Reduction Calculations

Type of Vehicle	VMTs (miles/year)	ICEV Efficiency (MPGGE)	ICEV Annual CO ₂ e per vehicle (MT)	ZET Efficiency (MPGGE)
Class 2B-3 Vehicle	24,000	13 (gasoline)	19.8	44.6
Class 4-6 Vehicle	16,500	6.5 (diesel)	31.7	26.1
Class 7-8 Vehicle	65,000	4.5 (diesel)	180.4	14.3

ZET annual GHG emissions vary by year based on grid emission changes under the New Mexico Energy Transition Act and the planned closure of the last coal-fired power plant in New Mexico, the San Juan Generating Station. The relative contributions of renewable resources, natural gas, and coal were sourced from the U.S. DOE Energy Information Administration (U.S. DOE EIA) for 2022 and 2023 and estimated for future years.⁵¹ The future year percent contribution of renewable resources increases to 50% in 2030 and 100% in 2050, following New Mexico Energy Transition Act requirements. The percent contribution of coal decreases linearly to 0% in 2032, following the closure of the San Juan Generating Station in 2031. Natural Gas makes up the remainder of electricity production. The relative contributions are shown in Figure 2.

Figure 2. New Mexico Electricity Generation by Source



The New Mexico electricity generation emission factor was calculated as follows:^{52,53}

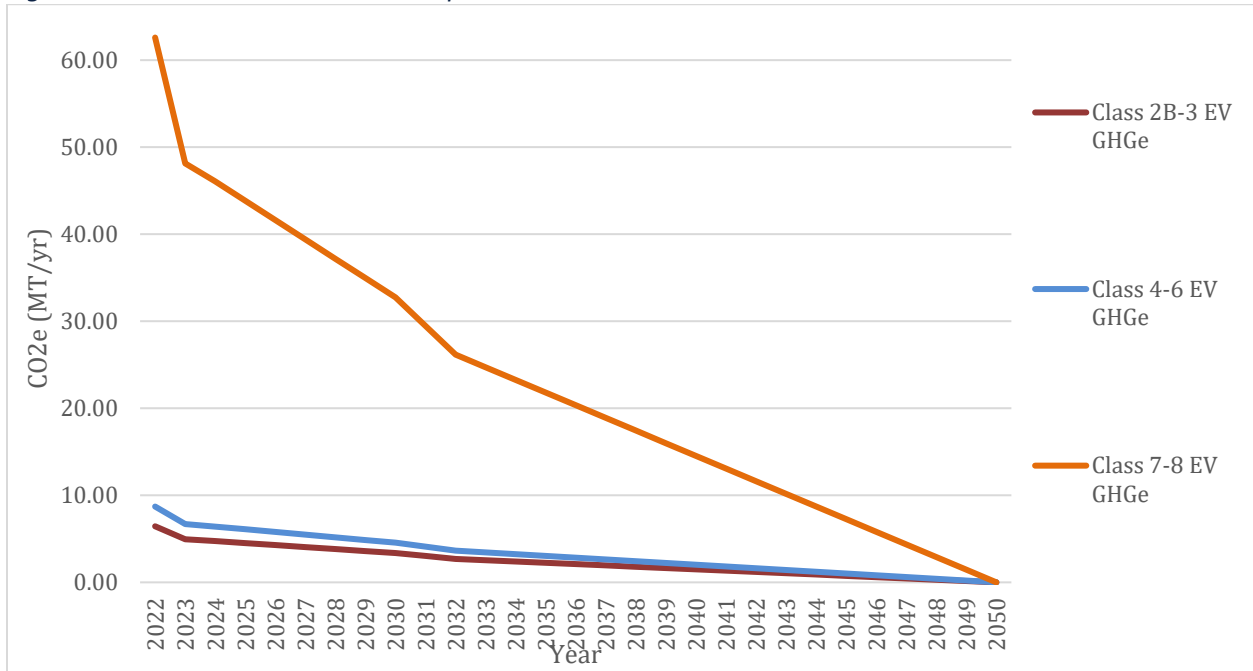
$$Coal\ EF = 10689 \frac{Btu}{KWh} * \frac{1\ mmBtu}{10^6 Btu} * \frac{1000\ KWh}{MWh} * 95.52 \frac{kg\ CO_2e}{mmBtu} * \frac{1\ MT}{1000\ kg} = 1.02 \frac{MT\ CO_2e}{MWh}$$

$$Nat.\ Gas\ EF = 7740 \frac{Btu}{KWh} * \frac{1\ mmBtu}{10^6 Btu} * \frac{1000\ KWh}{MWh} * 53.06 \frac{kg\ CO_2e}{mmBtu} * \frac{1\ MT}{1000\ kg} = 0.41 \frac{MT\ CO_2e}{MWh}$$

$$NM\ Generation\ EF_y = Nat.\ Gas\ EF * \%Natural\ Gas_y + Coal\ EF * \%Coal_y$$

2022 ZET annual GHG emissions per vehicle are calculated from AFLEET which uses 2022 grid emission factors for EVs (Figure 3). Future year ZET annual GHG emissions per vehicle were scaled to the New Mexico Generation EF.

Figure 3. ZET Annual CO₂e emissions per truck



The following equation was used to calculate GHG emission reductions from each class range of trucks:

$$\text{Class } X \text{ EV GHG Reductions} = \#TX * \sum_{Y_1}^{Y_2} \Delta GHG_Y * \%T_Y$$

The following equation was used to calculate the GHG Emission reductions from each level 2 or level 3 charging station:

$$\text{Level } X \text{ Charger GHG Reductions} = \#CX * CAPEX * \#_{TS} \sum_{Y_1}^{Y_2} EV_Y * \%CX_Y$$

where:

Y, Y_1, Y_2 = The years considered (e.g. 2030, 2025 – 2030, 2025 – 2050)

$\#TX$ = The number of trucks of each class (X) subsidized

ΔGHG_Y = The GHG emissions difference between diesel and EV in year Y

$\%T_Y$ = The percent of trucks paid for with vouchers in service in year Y

$\#_{CX}$ = The number of each charger type (X) subsidized

$\#_{TS}$ = The number of trucks served per charger (differs for Class 2 and Class 3)

EV_Y = The average ΔGHG_Y weighted by vehicle class and distribution of registrations

$CAPEX$ = The capital expenditure ratio for chargers to vehicles

GHG emission reductions were then scaled to reflect federal investment through the 45W or 20C tax credits as follows:

$$CPRG\ GHG\ Reduction = GHG\ Reduction * (1 - fraction\ paid\ through\ tax\ credits)$$

NMED does not anticipate that any other state or federal investment would be applied to these vehicles or infrastructure.

4.a.4 Reference Case Scenario

The reference case assumes that absent from the implementation of this measure the trucks replaced by this measure will be gasoline or diesel.

4.a.5 Measure-Specific Activity Data and Implementation Tracking Metrics

- Planned and actual operating routes for trucks,
- Number/rate/character of truck routes,
- Number/rate/character of trucks added and removed from fleets, and
- Number/rate/character of vehicle miles traveled by trucks paid for in part by vouchers.
- Number/rate/type of trucks utilizing chargers,
- Amount of electricity dispensed by chargers, and
- The electric source for each charger.

4.a.6 GHG and CAP Emissions Reduced

Table 19 presents the anticipated reduction of greenhouse gases from the implementation of this measure.

Table 19. Projected Greenhouse Gas Emission Reductions from the CTI Program

	Total GHG Emission Reductions			CPRG Attributable GHG Reductions		
	Annual 2030 (MT CO ₂ e/yr.)	Cumulative 2025 – 2030 (MT CO ₂ e)	Cumulative 2025 – 2030 (MT CO ₂ e)	Annual 2030 (MT CO ₂ e/yr.)	Cumulative 2025 – 2030 (MT CO ₂ e)	Cumulative 2025 – 2030 (MT CO ₂ e)
Class 2B-3 Vehicles	2,765	5,401	43,760	2,391	4,671	37,846
Class 4-6 Vehicles	15,172	29,765	237,906	10,621	20,836	166,534
Class 7-8 Vehicles	16,616	32,399	264,074	15,163	29,566	240,986
Level 2 Chargers	854	1,668	13,515	702	1,372	11,911
Level 3 (150kW) Chargers	2,535	4,951	40,127	1,694	3,308	26,814
Totals	37,941	74,183	599,382	30,571	59,753	483,299

Implementation of this measure is anticipated to reduce criteria air pollutants (Table 20):

Table 20. Projected Criteria Air Pollution Reduction from the CTI Program

Pollutant	Annual 2030 (tons/year)	Cumulative 2025 - 2030 (tons)	Cumulative 2025-2050 (tons)
NOx	30.38	60.76	455.67
PM2.5	0.24	0.47	3.55
SO2	0.23	0.45	3.40
VOC	2.14	4.28	32.13

4.b. ECO SCHOOLS

4.b.1 Emission Reductions Estimate Method, and Models Used

Emissions for ICE school buses and ESBs were modeled using the AFLEET Tool. For the charger component of the measure, a percentage of ESB emission reductions based on capital expenditure was used to estimate attributable emissions reductions. For the buildings component emission reductions were modeled using projected energy savings and emissions savings based on the 2023 Innovative Energy Financing Projects Report by EMNRD.⁵⁴

4.b.2 Measure Implementation Assumptions

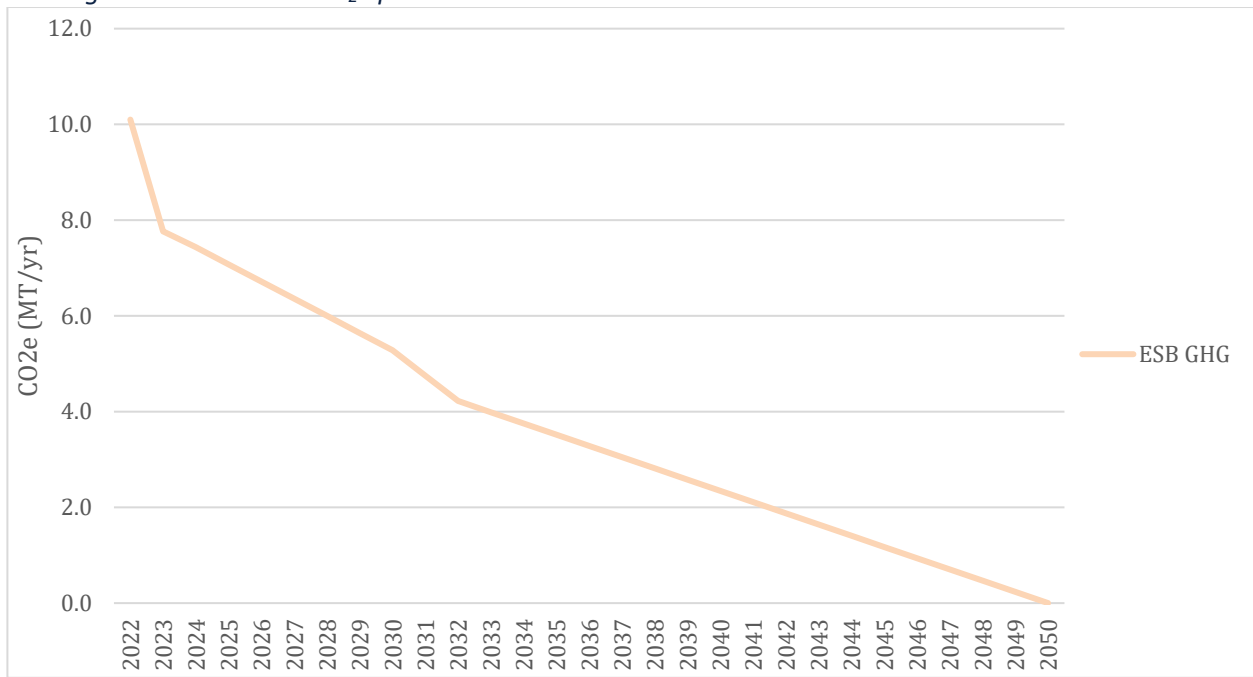
The following key assumptions about measure implementation were used to quantify emissions reductions for this measure:

- 25% of vehicles and infrastructure are in service in Q3 2026,
- 50% of vehicles and infrastructure are in service in Q3 2027,
- 75% of vehicles and infrastructure are in service in Q3 2028,
- And 100% of vehicles and infrastructure are in service in Q3 2029.
- By statute, New Mexico public schools replace school buses every 12 years.
- ESB charging stations have a 15-year lifetime.
- Costs for ESBs and ESB charging units are based on quotes provided from Lake Arthur Municipal School District, Las Cruces Public School District, and Santa Fe Public School District.
- The cost of the ESBs and charging systems was reduced by the value of the federal § 45W and § 30C tax credits.
- This program will provide the following benefits:
 - 100 ESBs
 - 210 Charging Stations
 - 3rd party reviewers to enable 10 school districts per year to participate in the ESPC program (50 districts over the 5 years)
- Operation and maintenance costs will be paid by the schools and districts receiving the ESBs and infrastructure.

4.b.3 Emission Reduction Estimate Assumptions

ESB annual GHG emissions vary by year based on grid emission changes (Figure 4 and related discussion).

Figure 4. ESB annual CO₂e per bus



The following assumptions about the electric school buses and chargers' component of this measure were used to quantify emission reductions for this measure:

- 100 Electric School Buses
- 210 charging stations and ancillary equipment
- Average annual bus miles driven 15,000 miles per bus per year
- Diesel bus fuel efficiency of 22.5 MPDGE
- EV bus fuel efficiency of 7 MPDGE
- Diesel bus annual CO₂e per vehicle of 26.8 MT

The Socorro Consolidated School District was used as a prototype for what school districts could achieve through implementing the building component of this measure. The following key assumptions about the buildings component of this measure were used to quantify emission reductions for this measure:

- Building improvements at 10 school districts per year (a total of 50 school districts).
- Building improvements are financed through the ESPC program.
- Building improvements are ultimately paid for through school district funding.
- In New Mexico, school districts are funded with state and federal funds. 329.5 kW DC solar PV installed per district.
- 533 MWh/year electricity generation per district.
- Annual financial savings of \$154,856 / year per district.
- Annual energy Savings of 31.9%.
- Natural gas fuel savings of 425 MMBtu/year.
- Grid emissions factors vary with time as described in section 4.a.1.3.
- A natural gas emission factor of 0.0531 MT CO₂e/MMBtu.

The following equation was used to calculate GHG emission reductions from ESBs:

$$ESB\ GHG\ Reductions = \#ESB * \sum_{Y_1}^{Y_2} \Delta GHG_Y * \%IMP_Y$$

The following equation was used to calculate the GHG emission reductions from each ESB charging station:

$$ESB \text{ Charger GHG Reductions} = \#C * CAPEX * \sum_{Y_1}^{Y_2} \Delta GHG_Y * \%IMP_Y$$

where:

Y, Y_1, Y_2 = The years considered (e.g. 2030, 2025 – 2030, 2025 – 2050)

$\#ESB$ = The number of ESBs purchased

ΔGHG_Y = The GHG emissions difference between diesel and ESB in year Y

$\%IMP_Y$ = The percent of ESBs paid for through the measure in service in year Y

$\#C$ = The number of chargers purchased

$CAPEX$ = The capital expenditure ration for chargers to vehicles

GHG emission reductions for ESBs and charging stations were then scaled to reflect federal tax (30C) credits.

$$CPRG \text{ GHG Reduction} = GHG \text{ Reduction} * (1 - \text{fraction paid through tax credits})$$

The following equation was used to calculate emission reductions from solar generation at schools:

$$Solar \text{ PV GHG Reductions} = Solar \text{ Generation} * \sum_{Y_1}^{Y_2} NM \text{ Generation } EF_Y$$

The following equation was used to calculate emission reductions from building retrofits:

$$\begin{aligned} \text{Building Retrofit GHG Reductions} \\ = \text{Natural Gas Savings} * \text{Natural Gas Emissions Factor} \end{aligned}$$

GHG emission reductions from ESPCs were then scaled to reflect federal and state funds ultimately paying for improvements:

$$CPRG \text{ GHG Reduction} = GHG \text{ Reduction} * \left(\frac{CPRG \text{ Budget}}{Total \text{ Budget}} \right)$$

4.b.4 Reference Case Scenario

The reference case assumes that absent from the implementation of this measure the school districts assisted by this measure continue to utilize diesel school buses, and do not access the ESPC program.

4.b.5 Measure-Specific Activity Data and Implementation Tracking Metrics

The activity used to calculate actual GHG and CAP emission reductions from this measure will include:

- Annual VMT for each bus awarded.
- Annual VMT of EV buses charged by charging stations awarded.
- Grid energy savings at participating schools.
- Natural gas energy savings at participating schools.

4.b.6 GHG and CAP Emissions Reduced

Implementation of this measure is anticipated to reduce the following amounts of GHGs (Table 21):

Table 21. Projected Greenhouse Gas Emission Reductions from ECO Schools

	Total GHG Emission Reductions			CPRG Attributable GHG Reductions (MT CO ₂ e)		
	Annual 2030 (MT CO ₂ e/yr.)	Cumulative 2025 – 2030 (MT CO ₂ e)	Cumulative 2025 – 2030 (MT CO ₂ e)	Annual 2030 (MT CO ₂ e/yr.)	Cumulative 2025 – 2030 (MT CO ₂ e)	Cumulative 2025 – 2030 (MT CO ₂ e)
ESBs	2,197	4,272	30,135	1,988	3,865	27,265
ESB Charging Stations	240	466	3,830	168	326	2,681
ESPC Program	12,934	41,729	242,402	35	115	665
Totals	15,371	46,467	276,367	2,191	4,306	30,611

Implementation of this measure is anticipated to reduce the following amounts of CAPs (Table 22):

Table 22. Projected Criteria Air Pollution Reduction from ECO Schools

Pollutant	Annual 2030 (tons/year)	Cumulative 2025 - 2030 (tons)	Cumulative 2025-2050 (tons)
NOx	8.4	22.8	172.7
PM2.5	0.0	0.1	0.8
SOx	0.3	1.0	8.2
VOC	0.2	0.3	2.3

4.c. COBRA ANALYSIS AND METHODOLOGY

The CTI Program and ECO Schools are projected to improve public health from air pollution reductions, by \$547, 543 in 2030 (Table 23).

Table 23. Projected Annual 2030 Improved Public Health from Proposed Measures

	Reduced Mortality	Reduced Incidence	Monetary Value of Health Benefits (2017 dollars)
CTI Program	0.038	22	\$423,716
ECO Schools	0.011	6	\$123,737
TOTAL	0.049	28	\$547,453

For Table 23, Table 4, and section 2.c.1.2.2 above, all data represent the average value of the "low" and "high" values output from EPA's CO-Benefits Risk Assessment Health Impacts Screening and Mapping Tool ([COBRA](#)). Reduced Health Incidence equals the sum of reduced incidences, including only Nonfatal Heart Attacks, Infant Mortality, All Respiratory Hospital Admits, Cardiovascular Hospital Admits, Acute Bronchitis, Upper Respiratory Symptoms, Lower Respiratory Symptoms, Asthma Emergency Room Visits, Asthma Exacerbation, Minor Restricted Activity Days, and Work Loss Days.

Additionally, NMED performed its analysis using 2030 reduced emissions data, overlaying it on COBRA's pre-defined 2028 model inputs, which assumes no change in baseline data between 2028 and 2030. Next, to estimate cumulative emissions from 2025 to 2050, NMED multiplied the annual outputs by a constant factor of 15 to all outputs. 15 represents the number of years that most vehicles and infrastructure in these measures are assumed to be in service between 2025 and 2050.

5 ENDNOTES

- ¹ E3 2021 “GHG Emission Inventory” for NMED, using the pathways model. Available on request.
- ² U.S. EPA 2020 National Emissions Inventory Data.
- ³ U.S. DOE, NCES, “Common Core of Data (CCD), [Table 3. Number of Operating Public Elementary and Secondary Schools, by School Type, Charter, Magnet, Title I, Title I Schoolwide Status, and State or Jurisdiction: School Year 2021–22](#),” Ed.gov (2023).
- ⁴ U.S. Census Bureau. American Community Survey. 5-Year Estimates Selected Population Data Profiles. Table DP-03: Selected Economic Characteristics. 2021. Calculations exclude Puerto Rico.
- ⁵ The Advanced Clean Trucks rule was adopted by New Mexico’s Environmental Improvement Board in late 2023 under the New Mexico Administrative Code, Title 20, Chapter 2, Part 91 (i.e., [20.2.91 NMAC “New Motor Vehicle Emission Standards”](#)).
- ⁶ U.S. DOT, FHA, Office of Freight Management and Operations, Freight Analysis Framework (FAF), version 5.1. 2017. [“Estimated FAF Flow for Trucks Passing Through New Mexico on National Highway System.”](#)
- ⁷ Ibid. “Estimated FAF Flow for Trucks Going To, From, and Within New Mexico on National Highway System.”
- ⁸ For efficiency, “program beneficiaries” of participant support costs provided by NMED through these measures are referred to throughout this application as “awardees”.
- ⁹ Perera FP. 2017. [“Multiple threats to child health from fossil fuel combustion: impacts of air pollution and climate change.”](#) Environmental Health Perspectives 125:141–148.
- ¹⁰ Based on crude death rate per million people per state; Division of Vital Statistics, National Center for Environmental Health. [“Most Recent Asthma State Data.”](#) Centers for Disease Control and Prevention, 2023.
- ¹¹ EPA. 2014. [“Near Roadway Air Pollution and Health: Frequently Asked Questions.”](#)
- ¹² NM DOH, Environmental Public Health Tracking Program. N.D. [“Asthma in New Mexico.”](#)
- ¹³ American Lung Association. 2018. [“Current Asthma by State.”](#) Asthma Trends Brief.
- ¹⁴ U.S. DOT FHWA. [“Fact Sheet: Charging and Fueling Infrastructure Discretionary Grant Program,”](#) 2024.
- ¹⁵ U.S. DOT FHWA. [“Fact Sheet: Carbon Reduction Program,”](#) 2021.
- ¹⁶ U.S. DOT FHWA. [“Fact Sheet: Congestion Mitigation and Air Quality \(CMAQ\) Improvement Program,”](#) 2022.
- ¹⁷ U.S. DOT FHWA. [“Fact Sheet: National Highway Freight Program \(NHFP\),”](#) 2022.
- ¹⁸ U.S. DOT FHWA. [“Fact Sheet: Tribal Transportation Program \(TTP\),”](#) 2022.
- ¹⁹ U.S. DOT FHWA. [“Fact Sheet: National Electric Vehicle Infrastructure Formula Program,”](#) 2022.
- ²⁰ U.S. DOT. [“The Mega Grant Program,”](#) 2024.
- ²¹ U.S. DOE. [“Smart Grid Grants,”](#) 2023.
- ²² U.S. Internal Revenue Service. [“Internal Revenue Code \(IRC\) 45W,”](#) 2024.
- ²³ U.S. Internal Revenue Service. [“Alternative Fuel Vehicle Refueling Property Credit,”](#) [26 U.S. Code 30C, 30D, 38, and 6417](#) and [Public Law 117-169. More details.](#) 2024.
- ²⁴ EPA. [“Clean Ports Program,”](#) 2024.
- ²⁵ EPA. [“Clean Heavy-Duty Vehicles Program,”](#) 2024.
- ²⁶ EPA. [“Diesel Emissions Reduction Act \(DERA\) Funding,”](#) 2024.
- ²⁷ State of New Mexico, 56th Legislature. [“House Bill 252: Adjust Income Tax Brackets,”](#) 2024.
- ²⁸ U.S. EPA. [Strategic Plan](#)
- ²⁹ Zero Carbon Consortium derives coefficients from input-output analysis using IMPLAN; Zero Carbon Consortium. [“America’s Zero-Carbon Action Plan”](#) (ZCAP). 2020. [Sustainable Development Solutions Network.](#)
- ³⁰ U.S. DOE, Argonne National Laboratory, Technology Integration Program. [“AFLEET Online,”](#) 2024.
- ³¹ Zero Carbon Consortium derives coefficients from input-output analysis using IMPLAN; CTI Program includes measures for both MHDV; ECO Schools includes measures for both buildings and buses.
- ³² NMDWS. [“Employment Projections,”](#) N.D.
- ³³ For Specialty Trade Contractors, there is 11.7% projected job growth in New Mexico versus 4.2% for the U.S.

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- ³⁴ U.S. Bureau of Labor Statistics. *Quarterly Census of Employment and Wages*. "[Private, NAICS 6-Digit Industries, New Mexico 2023 Second Quarter, All Establishment Sizes](#)."
- ³⁵ North American Industrial Classification System (NAICS) codes 238212 and 238222, versus all industries.
- ³⁶ State of New Mexico. "[Workforce Innovation and Opportunity Act \(WIOA\): Combined State Plan. Program Years 2020-2023](#)." 2020.
- ³⁷ Garrat, Joy, et. al. "[House Bill 5: Workforce Development and Apprenticeship Funds](#)." 56th New Mexico State Legislature. 2024 Regular Session. Passed on February 14, 2024.
- ³⁸ U.S. Department of Housing and Urban Development. "[State Community Development Block Grant Program Eligibility Requirements](#)," 2022.
- ³⁹ U.S. Census Bureau. *American Community Survey*. 5-Year Estimates Selected Population Data Profiles. Table DP-03: Selected Economic Characteristics. 2021. Calculations exclude Puerto Rico.
- ⁴⁰ The Workforce Innovation and Opportunity Act (H.R. 803, 2014) limits WIOA reimbursement for on-the-job training (OJT) to no more than 50% of a worker's wages (with state discretion to increase to up to 75%), but no less than the higher of federal, state, or local minimum wages.
- ⁴¹ Foxx, et. al. "[H.R. 803 – Workforce Innovation and Opportunity Act](#)." 113th U.S. Congress. July 22, 2014.
- ⁴² When "braided" with Title-I WIOA funds, approximately \$10,000 of grant funds would cover the cost of training for each worker.
- ⁴³ NMDWS. "[Prevailing Wage Poster, General Building](#)," 2024.
- ⁴⁴ U.S. Department of Commerce. "[Job Quality Toolkit](#)," N.D.
- ⁴⁵ The Workforce Innovation and Opportunity Act (H.R. 803, 2014) limits WIOA reimbursement for on-the-job training (OJT) to no more than 50% of a worker's wages (with state discretion to increase to up to 75%), but no less than the higher of federal, state, or local minimum wages.
- ⁴⁶ 113th U.S. Congress. "[H.R. 803 – Workforce Innovation and Opportunity Act](#)," 2014.
- ⁴⁷ When "braided" with Title-I WIOA funds, approximately \$10,000 of grant funds would cover the cost of training for each worker.
- ⁴⁸ The Workforce Innovation and Opportunity Act (H.R. 803, 2014) limits WIOA reimbursement for on-the-job training (OJT) to no more than 50% of a worker's wages (with state discretion to increase to up to 75%), but no less than the higher of federal, state, or local minimum wages.
- ⁴⁹ 113th U.S. Congress. "[H.R. 803 – Workforce Innovation and Opportunity Act](#)," 2014.
- ⁵⁰ When "braided" with Title-I WIOA funds, approximately \$10,000 of grant funds would cover the cost of training for each worker.
- ⁵¹ U.S. DOE EIA, "[Electricity Data Browser](#)." Accessed March 18, 2024.
- ⁵² U.S. DOE EIA, Form EIA-923, "[Power Plant Operations Report](#)."
- ⁵³ EPA. "[GHG Emissions Factor Hub](#)." Accessed March 16, 2024.
- ⁵⁴ NM EMNRD. "Innovative Energy Financing Projects Annual Report". 2023. Obtained by private correspondence. Available upon request.